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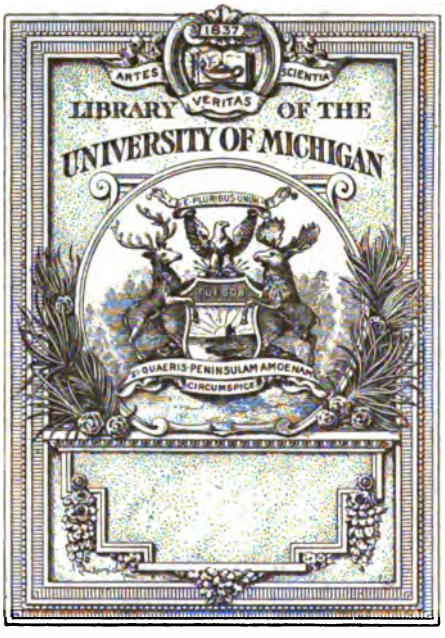
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—THE—

BULLETIN OF PHARMACY

A LIVE MAGAZINE FOR DRUGGISTS

EDITOR:
HARRY B. MASON, PH.G.

ASSISTANT EDITOR:
JOHN HELFMAN, B.S.PHAR.

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THE MONTH'S HISTORY

ECHO OF WILEY-RUSBY INCIDENT.

Of sensational developments in the drug trade there have been none of late. Everybody must have been too busy buying Christmas presents—or in collecting the money necessary for the fulfilment of this annual habit. The incidents and events which have kept us on the *qui vive* for the last few months have now become matters of history, although there *was* an echo last month of the Wiley-Rusby episode.

Dr. Rusby finally got very weary of having his good name impugned, and he brought suit for libel against one Alvin H. Warth. Warth, it seems, is a chemist who lives at Stapleton, on Staten Island, and he is charged with writing a letter to Secretary Wilson several months ago reiterating some of the accusations against Dr. Rusby which were brought out in the congressional investigation. The letter, however, was not printed at the time, but only turned up in the newspapers several months later.

Dr. Rusby thought it was a good chance to hit a head that was plainly in sight, so he went after Warth and began a prosecution for criminal libel. Warth says he didn't write the letter, and Secretary Wilson's presence in court may be necessary before the fact is proved. Anyway, even if he did write it, the general opinion is that he was merely acting as a stool-pigeon for somebody else. In other words, some people who disliked Wiley and Rusby were using this means of venting their spleen under cover.

It strikes us, however, that Dr. Rusby has taken the matter rather too seriously. Nobody who knows him believes any of the silly intimations and innuendoes which have been uttered regarding his work for the government. If he tries to run down every fool rumor, he will find himself spending money and time in an effort to clear a reputation which doesn't need any clearing. People who are in the government service will apparently have to do what politicians very early learn—ignore and forget a whole lot of things!

* * *

CONCENTRATE LOCAL ASSOCIATIONS!

The proposed *Journal of the American Pharmaceutical Association* is, we believe, to make its appearance during the present month, but in the meantime Editor James H. Beal is beginning to use the constructive wisdom which caused him to be elected to his position at the Boston meeting last August. In a recent issue of the old "Bulletin of the A. Ph. A." he had an editorial pointing out the directions in which the local branches might be developed in the interests of the organization as a whole.

Inasmuch, he declared, as the A. Ph. A. is the one all-embracing body in which every branch of the drug trade is represented, every city of any size should have a local branch

acting as a sort of parent to other local drug associations. Thus, for instance, the local retail druggists' association, so-called, might well be the commercial section of the A. Ph. A. branch, and other bodies, if there were such, could similarly be brought under the same ægis. The meetings could be held on the same or on alternate evenings, but the policy of concentration would make for more effective and united work.

The get-together meetings with physicians, which have become such regular features of association work during the last few years, could be handled much more efficiently by such an amalgamation. And in cities where there was a college of pharmacy, it would be advantageous to so arrange the meetings as to encourage the attendance of senior students. This would swell the size of the meetings, increase their interest, and tend to make association workers of the young men who are to be the pharmacists of to-morrow. An important factor in successful branch work, too, is to keep in touch with the local newspapers by sending them announcements of reports of the meetings—and in a number of ways, readily apparent to the thoughtful mind, such a policy of concentration as Professor Beal outlines commends itself most heartily. It is worth thinking about seriously.

* * *

THE NEW "CONFERENCE" IN NEW YORK.

The extent to which power is frittered away by the division of pharmacists into too many associations is well illustrated in Greater New York. There are probably eight or ten organizations in that city. They vary in the number of members from 75 to perhaps more than 500. Quite frequently they are at loggerheads with one another, and always they fail to work with skill and effectiveness when something important needs to be done—like heading off inimical legislation or modifying the decisions or regulations issued by the city board of health.

This truth has been realized for years, and now we find that some sort of a Conference has been or will be organized. This is to be a delegate body, consisting of three members from each of the local associations. A constitution is being voted upon and approved by the various bodies. The proposed Conference can act promptly in time of emergency—that is, if the delegate associations won't be vested with too much power as autonomous and independent states. Our friends, the druggists of Greater New York, have never shown any great capacity to get together and to stay together, but we trust that the new movement promises something definite in this direction.

Work for the Conference to do is immediately at hand. The New York and New Jersey Telephone Company announced some time ago that it had reduced druggists' commissions on outgoing calls from 20 to 10 per cent. A meeting of the Conference was at once called and it was voted to ask the company for a 30 per cent commission. In other cities commissions of 30 and even 40 per cent are paid, and it is in situations of this kind that a united drug trade can get what it wants. At the meeting of the Conference C. O. Bigelow showed that it cost the average druggist about 25 per cent to do business, whereas he would be getting 10 per cent under the new commission offered by the telephone company! We hope the druggists of New York will fight and fight hard.

* * *

RISKY SPECULATION.

From a recent copy of the "Bulletin of the National Association of Credit Men" we find that the merchants of Canada have been calling the attention of retailers in the western provinces to the "unfairness of speculating in real estate with money which rightfully belongs to those who have supplied them with goods, this speculation being made possible through the holding up of payments overdue." The retailers are being urged to dispose of such real estate as does not legitimately belong to their business, where, that is, the speculation in it means that their interests are spread out too thinly to be available in case of unforeseen conditions which might tend to contract credit.

This sort of thing has been experienced in a somewhat lesser degree in our own country, notably in Oregon, Washington, and California. In rapidly developing regions there is always a temptation on the part of business men to spread out their capital beyond the point where they can give it personal attention, and this is often done at the expense of their creditors. If a druggist, for instance, has the means with which to make wise investments, he is of course justified in making them. He may be

even justified in going a step further and borrowing the money for the purpose, providing he has ample security. But to indulge in purely speculative enterprises, and to thin out his money so far that he puts himself in great danger in case of reverses, is certainly not excusable except he has ready money enough to pay the bills of the manufacturers and the jobbers when they fall due. Otherwise he is practically using the money which belongs to the latter for himself, and he is in danger of losing his credit rating entirely.

The credit men's organizations can scarcely be blamed for taking up this question and sounding a note of warning. They have to look after their own interests, and on purely selfish grounds alone it pays the average merchant to heed what they tell him. A business man without credit is a man who is greatly crippled.

* * *

"Ph.B." DEGREE IN PHARMACY.

At the last meeting of the Conference of Pharmaceutical Faculties, held in Boston during August, the assertion was made in the address of President J. O. Schlotterbeck that the use of the degrees Ph.D. and Ph.B. in pharmacy were fraudulent and should not longer be tolerated. This point of view was unanimously approved after some discussion. It was repeatedly declared that both degrees have a well-established meaning in educational circles, and that to use them for relatively short courses in pharmacy was entirely without excuse. It ought to be explained, however, that approval was given to the use of the degree of Doctor in Pharmacy, provided the title of "P.D." or "Phar.D." is employed, so that there would be no confusion with the well known "Ph.D.," which of course means Doctor of Philosophy.

We are reminded of this discussion by the receipt of a letter from one of the Middle Western States. The writer is a man who received the degree of Ph.B. from the University of Michigan in 1893. He was given it, of course, after the completion of four years of academic training, and it stood for Bachelor of Philosophy. He tells us, however, that in his section a number of pharmacists have received a degree of Bachelor in Pharmacy instead of Ph.C. or Ph.G., and that the abbreviation used is identical with that belonging to Bachelor of Philosophy, namely, Ph.B. So general is this custom that he has often been asked, by people who observe his use of Ph.B. after his name, what particular college of pharmacy he graduated from!

This is just the point brought out in Dr. Schlotterbeck's address. "Ph.B." stands for something definite to those who know about university education. It means four years of strict university work, and it can only be used in technical institutions like pharmacy schools fraudulently. "Phar.B." is a different thing —"Phar." is plainly a contraction of pharmacy. But Ph.B. should mean nothing but Bachelor of Philosophy. To try to make it mean Bachelor of Pharmacy is to indulge in ambiguity and fraud.

* * *

ADVANCE YOUR PRICES!

A paper was read before one of the State pharmaceutical associations last summer (we do not recall which particular one it was) in which the thesis was proved that the druggist's profits have not kept pace with the increased cost of living. Quite a collection of statistics was given to point the moral. Now we find that the members of the Chicago Retail Druggists' Association are waking up to the fact that they are even selling certain drugs at the same old figure despite their quite appreciable increase in cost. At a recent meeting of the C. R. D. A., for instance, Mr. Sandkoetter pointed out that a number of drugs had well-nigh doubled or trebled in cost within a few months, and yet they were still being retailed by most druggists at a price based on the former cost. So important does this point seem to be that it was decided to print a series of articles in *C. R. D. A. News*. From the first article in this series we find that:

Oil of Cloves has risen from 90c to $1.40; Oil of Cubebs, $2.50 to $4.50; Oil of Peppermint, $2.50 to $3.75; Oil of Spearmint, $2.50 to $4.50; Menthol, $3.00 to $7.25; Golden Seal Root or Powder, $2.50 to $6.50; Fluid Extract of Golden Seal, $8.00 list to $16.00 list; Fluid Extract of Ergot, $3.00 to $6.00; Codeine Phosphate, $3.75 to $6.40 per ounce; Powdered Opium, $7.25 to $10.25 per pound; Larkspur Seed, 45c to $2.00; Fluid Extract of Larkspur, $3.00 list to $6.00 list; Buchu Leaves, 90c to $1.60 per pound.

The wise druggist, of course, should carefully watch fluctuations of this kind and should change his selling prices accordingly. Otherwise he will be losing a lot of money and wondering where it goes.

A PRESCRIPTION NO DEFENSE.

Several times in this journal we have made it plain that a physician who prescribed liquor illegitimately could not hope to escape punishment, and that a druggist who dispensed such a prescription would find that the law did not protect him. This point was very clearly and interestingly brought out in a Pennsylvania case. A druggist and a physician were jointly indicted for conspiracy. They set up in defense that a physician had a perfect right to prescribe whatever he chose for his patient, and that a druggist, acting under the Pennsylvania liquor act, had a right even in dry territory to furnish liquor on a physician's prescription. The judge held, however, that both men had two personalities. The physician, for instance, was a doctor on the one hand, and he was a mere man on the other. He might do certain things as a doctor, discharging the duties of his profession properly, which he might not do as a man. The point in this case was: was he acting as a physician or as a mere citizen?

The judge went on to express himself as follows:

> The act of assembly [under which the case was brought] means that a prescription honestly given by a regularly registered physician shall be a perfect protection to a druggist. "You give me a quarter and I will write (in the form of a prescription) an order for you to get a pint of whisky." Is that a prescription given by a regularly registered physician within the meaning of the act of assembly, or is it simply an order given by the *man*, not the *physician*, on a certain drug store to furnish the bearer liquor? You can see the distinction. The act of assembly had a purpose, and it evidently was to allow druggists to sell liquor as a medicine only.
>
> If the physician writes a note to the druggist: "Give this man a quart of liquor," and the druggist takes that order, or so-called prescription, and sells the liquor, knowing that it is a fake prescription, then they are both guilty. If a druggist knows he gets an order from another man advising him to do a certain thing that is criminal, and he does it, he is guilty if he never spoke to the other man at all. He is guilty because he did the act, and the other man is guilty because he advised it.

Fine and imprisonment was the outcome for both men. A second case similar to the foregoing was tried in the Allegheny court, and both the physician and druggist were sentenced to pay a fine of $250. All of which proves again, that a prescription is no defense either to physician or pharmacist unless it is honestly given and honestly dispensed. It has often been declared that physicians may violate liquor and narcotic laws with impunity, simply by writing prescriptions, but this is not true.

* * *

"PATENTS" STILL SELLING.

Everybody knows that many magazine assaults on the patent-medicine business have been made during the last decade. So vigorous and so systematic have these been, and so apparently successful, that we should be prepared to believe that the sales of patent medicines had greatly fallen off in the meantime. But what are the facts? The Census Bureau in Washington has recently gotten out a comparative statement showing how the patent-medicine industry compared in 1909 with 1904. The number of establishments had increased from 2777 to 3642. The capital had increased from $75,607,000 to $99,942,000. The value of the products had increased from $117,436,000 to $141,942,000.

This doesn't look much like a reduction, does it?

Apparently the patent-medicine makers have increased in number, and in the size and scope of their business, quite as much as have manufacturers in other lines of trade. In one respect, however, the conditions in 1909 differed quite materially from those in 1904. The number of salaried officials and clerks increased by 62 per cent, whereas the amount of business done increased by only 21 per cent, and the number of establishments by 31 per cent. In other words, it apparently took more people proportionately to do a given volume of business, and it cost more in the way of advertising and so on. The business was a little harder to get, and had to be gone after more vigorously. This much, then, may perhaps be conceded as the result of the anti-patent medicine crusades.

* * *

THE PURE DRUG LAWS.

The pure food and drug authorities of the different States are getting more and more active every year, and it behooves druggists to stay in out of the wet. Alive to the situation in South Dakota, the Secretary of the State Pharmaceutical Association recently sent the following notice to the members of the organization:

> FELLOW PHARMACISTS:
>
> The Secretary is requested by the Board of Pharmacy to urge again, most earnestly, every member of

our Association to be active in complying with the PURE FOOD AND DRUG LAW and the features specified from time to time by Commissioner Cook. We would especially call your attention to the requirement that only U. S. P. Alcohol (Cologne Spirits) should be used in U. S. P. and N. F. preparations. If you do not have the facilities for manufacturing the more potent and official preparations and for knowing that they are up to standard, would advise that you purchase in small quantities from some reliable pharmaceutical manufacturing concern or jobber who will guarantee U. S. P. strength. The additional cost is so small that you cannot afford to do otherwise. Any information you desire relative to standardization will be cheerfully given by Commissioner Cook or the Board of Pharmacy.

One other matter—retail prices have not advanced in proportion to the increased cost of supplies. Not only in our line do we pay more, but this is also true of nearly everything we purchase in general. The Board recommends that an advance be made in the price of prescription work and on all other articles where additional cost is included. Let us purchase only the purest of drugs and chemicals, and then a good reasonable profit no one will deny us. Let the pharmacists get together in every county.

Very respectfully,
F. W. BROWN, President.
E. C. BENT, Secretary.

* * *

THE N. A. R. D. AND PRICE PROTECTION.

The chief subject of importance discussed last month at the mid-winter meeting of the Executive Committee of the N. A. R. D. was price protection. A whole day was devoted to deliberation on this important topic, and those were heard who had particular panaceas to advance. It was finally decided that the Miles-Freeman plan and the Boehm coupon method were perhaps the best available, but that neither in its present form could fill the bill. Mr. Frank H. Freericks, who was called into consultation by the committee in view of the lamentable illness of Judge Errant, argued that these two plans might be combined effectively, chiefly for the purpose of doing away with the bookkeeping required of the jobber by the Miles-Freeman serial numbering method. Mr. Freericks was therefore authorized by the committee to draw up such a plan and to submit it to the committee for consideration. It will then be published in *N. A. R. D. Notes* and thrown open for general discussion. The redeemable coupon feature of the Boehm plan, drafted on to the Miles-Freeman method, will, it is hoped, obviate the necessity of record keeping to which the wholesalers object so strenuously.

THE DEATH BENEFIT IDEA.

Wilhelm Bodemann of Chicago is very much interested in the idea of establishing a coöperative death benefit plan among pharmacists. He has sent us two or three letters on the subject which have appeared in the BULLETIN from time to time, and other druggists have responded with approval. We gave space last month, for instance, to a communication from John C. Endress. It strikes us that the idea is worth developing. The plan would be simply for each member to be assessed 50 cents or $1.00, say, whenever there was a death, and the amount so collected would be sent to the widow to help defray the funeral and other expenses. Oftentimes the best of men die without leaving very much in the way of money, and four or five hundred dollars, or even less than that, becomes almost a godsend. If a thousand men would go into the scheme, and the assessment were modestly set at 50 cents, this would make $500—a very tidy sum in cases of emergency. The logical organization to push this thing is the N. A. R. D., and we commend the proposition to Major-General Charles Mylert Carr, soldier, propagandist, and penman-in-chief of the organization.

* * *

A CHANCE TO PROTEST.

Ever since the food and drugs act went into effect, we have heard occasional complaints that important decisions had been made, and bulletins published, before hearings had been granted by the government to affected parties. It has been urged that manufacturers have thus been subjected to much loss of business and reputation without being given any opportunity to defend themselves. Protests have been made in vain, however, until now we find that Secretary Wilson has sanctioned a tentative plan to give those concerned an opportunity to be heard before the final approval and publication of decisions and bulletins. On the face of it, this looks like a very fair proposition, and it is to be hoped that it will work out satisfactorily.

* * *

Arthur A. Pardee, one of the pioneer druggists of Madison, Wisconsin, and one of the old guard who helped organize the N. A. R. D. in St. Louis in 1898, died a few weeks ago as the result of a paralytic stroke.

EDITORIAL

NONE SO BLIND AS THOSE WHO WON'T SEE.

Yes, this is another screed on that shop-worn and hackneyed theme—the Shorter Hour Question. We have discussed it for years from every angle and repeated ourselves the Lord knows how often! At conventions we have listened while others talked about it, and sometimes (in moments of indulgent leisure) we have even read what others besides ourselves have written about it. Time and again our weariness of soul has caused us to threaten never again to talk, or think, or write on the subject—and this *may* be our farewell sermon.

What is our excuse for approaching the topic again? Have we anything *new* to say? No—perhaps not. But there is one conviction which has slowly been forming in our minds during all these years of futile discussion, namely, that the shorter-hour and Sunday-closing question for the druggist is purely an individual question, and that it will never be solved except as the individual solves it for himself.

The love of money may not be the root of all evil, but it is the root of this one. So long as a druggist wants to squeeze every last cent from his business he will keep his store open all night long and all day on the Sabbath. He will hide behind the stock excuse that drugs are needed by the sick at any and all hours, when he knows perfectly well that the legitimate sales of this character after seven or eight o'clock in the evening won't pay the gas bill, and when he realizes thoroughly that the emergency wants of the sick are supplied by the physician from his case. If he is too honest to advance this argument, he will plead the sacred nature of Custom, and say that the public expects drug stores to be open when other shops are closed, shutting his eye to the fact that the public formerly expected the same thing of grocery stores, but quickly adapted itself to a changed situation when the grocers developed self-respect and refused any longer to make slaves of themselves.

Sometimes the druggist will frankly confess the truth and admit that he is after the soda, the candy, and the cigar business which comes to him in the evening and on Sunday. This is the nub of the question—the very heart of the whole matter. The druggist frankly wants to extract every last cent from the business—and, by the Eternal, he is going to do it! The indignant editorials on the subject, the association papers, the committee reports, the eloquent debates at meetings—these all slide off his back more easily than a duck sheds water. He listens calmly—and then does as he pleases.

We do not flatter ourselves that even this preachment will effect a revolution, but anyway we need the exercise, and we are determined for once to lay bare the essential truth of the matter before we resolve forever after to keep our peace.

This, then, is the core of the situation. The druggist simply wants to make all the money he can, regardless of how much time or energy or effort it requires. In this he is perhaps not unlike others. There are many business men who never rest—who make slaves and drudges of themselves in a mad scramble after wealth. There are many physicians who take every case they can get, and who work all day and all night in an effort to reap as large an income as possible. There are many lawyers who load themselves up with much more than they can accomplish, and who burn the midnight oil in a nerve-racking endeavor to accomplish what three men could scarcely do.

For some years we have personally had two physicians under observation. They are about the same age. Their training and equipment have been nearly alike. They have much the same sort of practice; their reputations are very similar; and in short the conditions which surround them are practically identical.

One of these men has been ceaselessly on the jump; he has slaved in season and out of season; he has often been out all night on troublesome cases; he has denied himself pleasure; he has robbed himself of rest and relaxation; and now at 45 or 50 years he is suffering from a severe breakdown. The other—what of him? He has been just as conscientious a student; he has made himself just as able a practitioner; but he has taken time for his family, for recreation, for pleasure; he has extracted something from life beyond ceaseless toil; he has kept his mind and

his body fresh; and now at the same age he is looking and feeling in the pink of condition with many years of happiness and strength ahead of him.

What does it profit a man who gains money if he lose all the zest of life and health in the process?

The druggist who is in his store until 10 or 11 o'clock at night, and who works all day Sunday—what real pleasure is there for him in this vale of tears? He has no time for his family. He has no time for recreation. He is a stranger to the great out-of-doors which refreshes the spirit of man and sends him back to his work with renewed inspiration. He loses all the sweet richness of life, all the deep friendships, all the real joys. He becomes pale and bloodless and anemic, and even the work to which he dedicates himself so unreservedly loses its pleasure. He doesn't realize that ideas, and the energy to execute them, come only to the man who drops his business cares every day and rests his brain and his body. Thus he defeats his own purpose. He wants to make the most of his business, but in the very effort to do so he makes the least of it.

Does it pay?

The wise druggist is the man who doesn't care what his neighbors do. He doesn't care what custom is. Without waiting for anybody else he closes his store early in the evening. He likewise closes it all day, or nearly all day, on Sunday. He knows there are deeper pleasures than mere money-grubbing. He knows there are some things which money cannot buy nor wealth secure. He realizes that he can only live his life once, and he determines to live it fully and joyously and happily. If it costs him anything, well and good—he is prepared to pay the price. It is worth it. He is going to *live*—whether other people have sense enough to or not.

THREE PRIZE OFFERS FOR BULLETIN READERS!

We have been busy for several weeks making plans for the BULLETIN during the coming year. We do not want to say very much about them now—performance is somewhat better than promise. Suffice it to remark at this time that we have sent out more than 150 personal letters in search of special articles and illustrations of different kinds, and we honestly believe that as the result of these efforts we shall be able to lay before our readers during 1912 a magazine full of novel, interesting, and helpful things—things you cannot afford and will not desire to miss.

Our chief object in writing this editorial, however, is to say that we are depending upon our readers in general for certain classes of material. We are anxious to solicit their cooperation and assistance, and we are therefore making the following prize offers:

1. We shall pay $5.00 at once for every accepted article on "My Best Paying Side Line," and we can use quite a number of them!

2. We shall pay $10.00 for the best article, and $5.00 for the second best article, on "My Experience in the Sale and Fitting of Trusses." Only the two papers winning prizes can be accepted on this subject.

3. We shall pay $10.00 for the best, and $5.00 each for the two next best, formulas for a hair tonic.

So there you are! Now please let us hear from you—the more the merrier. We can say honestly that the material we get from readers of the BULLETIN themselves is highly valued by us. It is always practical, gets right down to brass tacks, and has those money-making elements in which every live druggist is vitally interested.

As for the papers on side-lines, we may say that we are anxious to discuss this subject quite at length during 1912. The fact of it is, competition has gotten so severe in the drug business—and in all lines of trade for that matter—that the resort to side-lines has become a matter of vital necessity with the great rank and file. We want to know what goods energetic druggists have handled with the greatest amount of success—and we want to know what methods they have used in exploiting them. If the lines carried have been out of the ordinary—so much the better. Perhaps we can develop something new in this agitation of the subject. In the meantime let us caution our writers to get right down into the heart of the matter and describe costs, profits, the volume of sale, the advertising methods used, the talking points employed, the display methods utilized, the results manifested in the increase of business, and all of the practical, money-making details of the proposition. Facts—that's what we want!

As for trusses, not every druggist handles them, but some druggists, as we know from observation, have made them one of their most successful lines. They have specialized on them. They have even devoted one or two rooms to the fitting of trusses. Usually where close attention is given to trusses it is easy to work up a very satisfactory and profitable business on them. We want at least two cracking good articles on the subject of trusses, and in these articles we want druggists to tell just how they have gone about the task of building up their trade on the line. Please get right down to the details so that other druggists in other towns can follow the same methods.

It isn't necessary, is it, to say much about our prize offer for hair-tonic formulas? Nearly every druggist puts out a product of this kind under his own label. If you have been proud of your own hair tonic; if you have pushed it to any extent; if you have built it up into a nice seller—then we want to know about it. Give us the formula; tell us what it costs; tell us what it sells for; send along sample advertisements which may have been used to exploit it; and if a carton is used, mail us one of these, too. Ten dollars for the best formula, and $5.00 each for the two next best.

This is about all—now please get busy and send us a whole lot of contributions under these three heads! We've got a few five- and ten-dollar checks that we are anxious to pass out—they take up a lot of extra room here in the office and we want to get rid of 'em!

REGARDING INFUSION OF DIGITALIS.

While one rarely hears criticism nowadays of the preparation of tinctures by dilution, it is quite customary for the statement to be advanced that infusion of digitalis ought never to be made in this manner, and that it should invariably be prepared direct from the drug. This idea is based on the supposition that water extracts certain principles from digitalis which an alcoholic or hydro-alcoholic menstruum will not extract, and that the peculiar virtue of the infusion over the tincture or fluidextract resides in these qualities. Is this supposition correct?

In this connection an article by C. Focke (*Arch. der Pharm.*, 249, 323) has proved of considerable interest to us. The author finds that if an infusion of digitalis leaves is prepared in the usual way, and has a strength, say, of 10 per cent, it will contain only about 74 per cent of the active constituents of the drug. A further infusion of the marc will result in the extraction of about 11 per cent more, or in other words it is possible only to extract about 85 per cent of the total activity of the drug with the utmost care. No matter how the infusion is made, or what strength it may be, it is impossible by the ordinary infusion method to extract the total activity of the leaves. Finally—and this is the point we are coming to—the author declares that a fluidextract of digitalis leaves, when made with a 35-per-cent alcoholic menstruum, and when diluted to the strength of an infusion, will be found at least to possess the same activity as an infusion made from the drug itself, or, if anything, to be slightly more active.

In other words, there would seem to be little ground left standing under those pharmaceutical doctrinaires who hold that water extracts one set of active constituents from digitalis leaves, and that alcohol extracts still another and different set of constituents. The plain inference is that the properly selected alcoholic menstruum will exhaust the virtues of the drug, and that when one part of the product so made is diluted to any desired strength needed for an infusion by the use of boiling water, a preparation is obtained which is fully as active as the infusion made in the good old way, if not, indeed, more active.

Is our European friend correct? Is it possible that all this invective hurled at the "non-scientific" druggist for years past has no basis except in the imagination of his critics?

Waiving this point for the present, it is quite apparent that there is a good deal of confusion about the whole digitalis question. At the last meeting of the American Pharmaceutical Association, for instance, a warm discussion developed over the use of alcohol in the infusion of digitalis. Experienced pharmacists like Joseph P. Remington, Charles M. Ford, M. I. Wilbert, Henry P. Hynson and two or three others were absolutely unable to agree on the reason for the addition of alcohol. Some of the speakers

held that it was used purely as a preservative; others insisted that this was all tommyrot, and that it was employed to give flavor and palatability to the infusion; while still others decared that its purpose was to correct the influence of the drug on the stomach.

So there you are! It is quite evident that we don't know everything yet that is to be known about infusion of digitalis, and it might therefore be wise to withhold judgment awaiting a thorough study of the subject.

PROFITS AND EARNINGS

A LEAKING BUSINESS.

A California druggist sends us the following statement of his business with the request that we comment on it:

Inventory Jan. 1, 1910	$ 3,677 37
Inventory Jan. 1, 1911	4,200 68
Fixtures after deducting 10 per cent depreciation	1,626 11
Cash sales	19,656 90
Credit sales less $50.00 for doubtful accounts.	742 94
Cash on hand Jan. 1, 1911	618 58
Cash on hand Jan. 1, 1910	1,504 55
Note payable	1,600 00
Credit balance with jobber	25 00
Purchases	11,187 04
Transportation charges	323 50
Cash discounts	173 49
Personal withdrawals	3,787 39
Expenses	4,816 97

There are two sets of figures that can be drawn from any proper statement of a man's business. One set pertains to assets and liabilities, while the other set applies to his loss and gain. But if you take the difference between net assets at the ends of certain periods, that difference, plus the amount withdrawn for profits, will agree with the profits of the following year.

In 1910 this druggist's assets were $6988.69. At the end of 1911 his assets were $5613.31, showing a reduction in assets of $1375.38. Instead of a gain, there was a loss in assets. The owner either has not reported all the expenses or the amounts submitted representing assets are incorrect, being too small. He may have been robbed. He hasn't the goods. It would be well to see whether the sale tickets agree with the bank account. It would pay our correspondent to have his books audited and know where he is at.

Here are our figures:

ASSETS AND LIABILITIES.

	1910	1911
Fixtures	$1,806 77	$1,626 11
Inventory	3,677 37	4,200 68
Accounts receivable		25 00
		742 94
Cash	1,504 55	618 58
	$6,988 69	$7,213 31
Note payable		1,600 00
Present worth	$6,988 69	$5,613 31
		6,988 69
Loss, 1911		$1,375 38

The assets ought to be $6996.83, as may be seen from the following figures:

Assets, 1910	$6,988 69	
Profits, 1911	3,795 53	
	$10,784 22	
Personal withdrawal	3,787 39	
1911 assets should be	$6,996 83	
Assets according to statement	5,613 31	
	$1,383 52	short.

Our friend is shy $1383.52. He had better get busy and see what the trouble is. We take into account everything reported spent.

PROFIT AND LOSS, 1910.

Cost of merchandise sold		$10,813 74
Purchases	$11,187 04	
Transportation	323 50	
	$11,510 54	
Less for cash discount earned	173 49	
	$11,337 05	
Less for gain in inventory, 1910 over 1909	523 31	
	$10,813 74	
Expense		$ 4,816 97
Depreciation, 10 per cent on fixtures		180 66
Depreciation, on accounts receivable to cover doubtful debts		50 00
		$15,861 37
Cash sales		19,656 90
Year's profit		$3,795 53
Personal withdrawals		3,787 39
Balance of 1911 profit remaining in business		$8 14

It is evident therefore that our California friend ought to have a profit of $8.14 instead of suffering a loss of over a thousand dollars.

THE HALL OF FAME

DEATH OF DR. MUIR.

The death of Dr. William Muir, of Brooklyn, removes one of the sturdy and courageous figures in the drug trade. Without polish or ornamentation, his convention speeches

DR. WILLIAM MUIR.

bristling with inaccuracies and infelicities, he nevertheless convinced everybody of his rugged honesty of character and his great sincerity of motive. He was always to be found fighting for the right as he saw it, and for years and years he was the leading representative of the drug trade in New York State in looking after legislative matters at Albany.

The somewhat astonishing success of the Brooklyn College of Pharmacy, too, can be largely traced to the initiative, the determination, and the thick-and-thin loyalty of Dr. Muir. The feat performed by this institution in erecting a new building at considerable cost, in paying for it within a surprisingly few years, and in burning the mortgage in a spectacular and dramatic manner, aroused a good deal of admiration. Dr. Muir was the leading spirit behind the college, as he was the leading spirit also behind the parent of the college—the Kings County Pharmaceutical Society.

He was a strong figure generally in all matters touching on local and State pharmacy. He served one or two terms as president of the State Association. He was a member of the various boards of pharmacy for a considerable period. He was always in the thick of every fight, and among other things it may be pointed out that he was one of the leaders who carried the graduation prerequisite bill in New York State through to a successful culmination some years ago. In performing this achievement he did little less than usher in a new era in the educational development of the calling.

Dr. Muir was 61 years old and should have been vouchsafed many more years of useful service. He had, however, some heart trouble which had caused his intimate friends considerable worry for a number of years. Returning from his summer home at Lake Dunmore, Vt., last September, he had been confined to his Brooklyn home ever since. He had retired from active business a number of years before, but had never ceased to devote himself with single-hearted loyalty to the betterment of pharmacy.

Dr. Muir will be missed!

DEATH OF CHARLES E. DOHME.

While the death of Mr. Dohme had been expected for some time, it was none the less

CHARLES E. DOHME.

a shock to the drug trade of the country. He had long been a man held in high estimation in all branches of the trade. One of the

founders of the house of Sharp & Dohme, he had distinguished himself in that industry, and he was so conspicuous in the work of the American Pharmaceutical Association that he had been elected to the presidency in addition to many other offices of lower rank. When the Pharmacopœial Convention was incorporated ten or twelve years ago, he was elected a member of the Board of Trustees and was subsequently made chairman. Mr. Dohme was always a man of generous impulses and of decided charm of manner. His health had been gradually failing him for several years, so much so that he had practically withdrawn from business a long time since.

A DRUGGIST HIGHLY HONORED.

We are presenting this month the portrait of a pharmacist attired in the unusual splendor and dignity of a 33d degree Mason. As everybody knows who is familiar with the Masonic fraternity, the 33d degree is purely appointive; only a very few members ever attain it; and the honor is therefore one of great distinction. Our portrait shows Charles H. Patterson, a druggist of Jackson, Mich., who was crowned with the 33d degree at Saratoga Springs last September. Mr. Patterson is the only druggist in the State of Michigan to carry this honor, and possibly the only one in the United States. If there are any others, the BULLETIN would be very glad to hear from them.

C. H. PATTERSON.

Mr. Patterson is only 37 years old. His record of achievements and honors in the Masonic fraternity is quite impressive. He was made a Master Mason August 12, 1897, in Jackson Lodge No. 17, F. and A. M. He is a Past Master, Past High Priest, Past Thrice Illustrious Master, and Past Eminent Commander. He is a member of Moslem Temple, A. A. O. N. M. S., and a member of Michigan Sovereign Consistory, A. A. S. R., 32d degree. He is Past Grand Master of the Grand Council of Royal and Selected Masters of Michigan, and Grand Sword Bearer of the Grand Commandery of Knights Templar of Michigan.

Treasury Decision 32035 of the United States Court of Customs Appeals has defined a chemical compound to be "not simply a mingling of components, but a combination of them resulting in their destruction as distinct entities, and in the development by chemical reaction of a new substance possessing properties radically different from those of its constituent elements." "The word mixture [on the other hand] implies that the corporeal integrity, the separate chemical nature, and individual properties of the mixed ingredients have been preserved." This is in accordance with the well-known nomenclature of chemistry.

* * *

Friends of Judge Joseph W. Errant have been pleased to know that the Judge has so far recovered that he and Mrs. Errant have been able to go to California to spend the remainder of the winter in that more agreeable climate.

* * *

The St. Paul Drug Club of St. Paul, Minnesota, has recently been organized with a charter membership of 96. The purpose is, of course, social in nature, and it is hoped to establish permanent club quarters later on. H. Reitzke is president of the club.

J. M. Bickford, of Sterling, Ill., built this cottage on the shores of Torch Lake in Michigan last spring, and spent a month there during the summer with his family. The fish stories he told afterward were little less than startling

Here we have Mr. Bickford with his wife and two daughters on the porch of the cottage. After spending a month in this delightful retreat Mr. Bickford wrote us that "It is like pulling teeth to go back to work again"

This is a winter view of the home of Professor L. E. Sayre, of Lawrence, Kansas, Dean of the School of Pharmacy of the University of Kansas.

This picture suggests the pleasant home life of the Sayres, and will be much appreciated by the numerous friends of the Professor and his wife.

James S. Gleghorn, a druggist of Waynesburg, Pa., is here seen taking a joy-ride with his wife and mother. Some druggists know how to enjoy themselves.

The bowered retreat here shown represents the delightful home of Ernest Berger, of Tampa, Fla. Mr. Berger is president of the State Board of Pharmacy.

A page of Interesting Pictures.

These three representatives of the drug trade went deer hunting in the Adirondacks last October, and here they are seen having a Delmonico repast far from the madding crowd. Beans seem to be the staple article of diet.

This picture shows the three guardsmen again. In the center is Wm B. Myers, manager of the Raeden Pharmacy, Cedarhurst, L. I., while the other two figures are Charles Ogden and William Kaufmann, Long Island representatives of Parke, Davis & Co.

The three valiant hunters are now resting in camp. Ogden in the center is cleaning his gun with Euthymol, and Kaufmann is making a pretense of chopping wood.

"The last drop" is being squeezed out, and the proceeding is being watched with a great deal of anxiety. One of the guides sits at the left of the picture.

This picture shows how a traveling salesman in Colombia, Central America, gets from town to town. The figure on the left is P. R. Blanco, one of the traveling representatives of Parke, Davis & Co.

Here we have another photograph of Mr. Blanco, who has temporarily found a somewhat better strip of road. Most of the traveling in Colombia is done on mule-back, as these pictures indicate.

Another page of Pictures.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

There have been a good many instances chronicled of the success of men in building up great mercantile institutions. Some of these have been notable drug-store enterprises. It is not uncommon to read of the development of these larger achievements, but it is the story of the moderate success, the success possible to the average man, that does not often get told.

The big successes look impossible to the small dealer. He says: "Oh yes, that's all right, but my store is small, my town is small, my capital is small. I can't be a Riker-Jaynes or an Evans. I've got to dig out a living right here in this town, and the things those big fellows have done won't help me any."

Well, this is to be a story of a moderate success—of a success such as the average druggist can achieve. Since it is autobiographical it will of necessity contain a good many first personal pronouns, and it will probably sound rather egotistical in spots, but I am going to say right here that I realize that there is mighty little in the story to be egotistical about because whatever the success has amounted to, the chances missed, the things left undone, the opportunities allowed to slip past, have amounted to more, and any man might have done better than I under similar circumstances without possessing any exceptional qualifications.—FRANK FARRINGTON.

CHAPTER I.

BEGINNING AT THE BOTTOM.

Most fellows, before they get out of high school, have some idea of what they want to do, what they want to be. I did. I wanted to be, or at least I thought I wanted to be, a civil engineer.

But like most fellows, I have found that what I thought I wanted at sixteen or eighteen I would not have had at any price ten years later. If I had succeeded in getting a civil engineering education I would probably have ended as a section hand, because whatever my head may be for Cimicifuga Racemosa or Opodeldoc, it is certainly not strong for logarithms.

FALLING INTO THE DRUG BUSINESS.

Anyway, a man who owned the oldest and poorest drug store in our town owed my father quite a bunch of money, and as soon as I finished at the academy in June I was handed a second-hand dispensatory and invited to read it through, because, so they said, some day I might have a chance to be a druggist.

All the summer and all the fall I pored over that big, uninteresting book, usually with some small but much more interesting book inside of it, until at last the day came when the man who owned the drug store had to give up and father took it off his hands.

I hadn't really any time to think whether I wanted to be a druggist or not. I was not asked. And anyway I don't remember that I cared particularly. There was no money to send me to college, and I didn't see why I couldn't have a pretty good time working at the drug business—for my father.

Father did not stay in the store. He had other work. A nice old physician, who was also a druggist because he had been in the business when the pharmacy law was first

*Copyright, 1912, by Frank Farrington.

adopted, made the store his office, and he and I ran or tried to run the business—except the buying, which was done by my father, with our recommendations.

You know what kind of a store this was—old-fashioned front with small panes of glass—wooden steps and platform clear across the front, making a first-class place for idlers to idle—dingy paint and paper inside—show-cases on one side with tops that lifted up to give entrance—show-cases on the other side that had been nickel-plated in their day—prescription desk that was possessed of a pair of scales sensitive to a grain or two (sometimes, depending upon the weather)—weights that weighed what they were marked, more or less—running water only in the cellar, reached by a trap-door through the floor back of the counter.

There was no awning. It wasn't needed, because there was nothing in the windows that the sunlight would injure, and then, anyway, awnings cost money, and that store had not had any money spent upon it in many a moon.

The inventory showed a stock of about $1500, much of which was as unsalable as last year's birds' nests.

$15.00 A BIG DAY!

For a few years we hung on without creating any great commotion in local business circles. There were other drug stores, and the population of the town was (and is) less than 2000. Some days we did as much as three dollars in cash receipts. We didn't do any credit business, and it was a big day when the sales ran up to fifteen dollars.

The old doctor who started with us was not in line with progressive methods, and a good pharmacist was finally gotten to instruct me in the technical details and to supervise my studies—for it was ordained that I should learn the business without going to a college of pharmacy.

Whether a kind fate impelled the Board of Pharmacy (one member of which was the owner of one of the competing stores in my town) to ask questions to which I knew the answers, or whether I learned something about the drug trade in spite of youthful preferences for having a good time, I am not sure, but at all events, when my four years of experience were up, and I went before the board, I passed the examination, though to be sure the member from my town took pains afterward to intimate to me that he saw to it that everything was all right.

It was not long after this that my father's financial affairs assumed a stormy aspect, and since the plan was then for me to take the business as soon as I could swing it, it was decided that the sooner I took it, the better. It was turned over to me for an inventory of about $2500, and I assumed obligations of my father's to the amount paid for the business. His credit being still good, and his name being behind my own, I had no trouble in establishing credit relations with our whole-

A snapshot of Mr. Farrington taken behind the prescription desk when the sales were $10 a day.

sale houses, and while I did not have a cent to pay down in cash for the business, I did assume enough responsibility then to start a better financial system. I found it possible to save money when it became necessary.

My salary had not been exactly munificent while working as a clerk, and naturally my savings could not have been great. I received $1.50 a week and board the first year, then $2, and later $2.50 and board until I was licensed, when I was paid $5 and board, which by comparison looked pretty good.

EARLY NEWSPAPER ADVERTISING.

Even before taking the store myself I had begun to put into practice some advertising

ideas, and the accompanying specimens of newspaper ads. show what we did in the beginning to attract business. Our newspaper space was about three inches, single column, and that did not give room to say a great deal, but I always tried to make what I did say pointed and readable.

After all, that is what makes a good advertisement. Say no more than the public will be willing to read, and say it in such a way that after reading it a point will be left impressed on the mind.

It will be noticed that these small advertisements said almost too little, and that some of them were not much more than a catchy heading. They omitted prices, too, in a way that a few years of experience showed me

Mr. Farrington's store in the early days.

was poor policy. Still, they did get read, and the emphasis placed upon the "money-back" idea was the means of interesting the public.

ADOPTED THE MONEY-BACK PRINCIPLE.

This plan of refunding people's money whenever they have been dissatisfied I have followed steadily. It means that whenever the buyer thinks I ought to give him back his money I do so without any ifs or ands. Of course, there are some goods that we do not guarantee, but these are sold with that fact distinctly understood and mentioned at the time. Under such conditions no fair-minded person will expect a refund, and I have found that humanity in the long run is decidedly fair-minded.

There are occasional mistakes. It is not entirely rare for a customer to come in and want money back on goods bought at some other store. I have even given back the money in such a case, though usually there is no trouble in proving to the customer that the article came from somewhere else.

The instance referred to was where a customer brought back a defective hot-water bottle and asked for a new one in exchange. The article was of a brand we had never had in the store, but even after my explanations were made the customer still insisted that there was no doubt the bottle had come from us, so I gave her a new one. In about six months she came in and paid for the new bottle, saying that she had just found the one that came from our store and that the boxes had got mixed, etc. The woman was perfectly honest and the family were customers I could ill afford to lose. It paid me to make the exchange, even if the goods *did* come from some other store.

THE IMPORTANCE OF PERSONAL SERVICE.

It is in the matter of personal service to customers that the small druggist has the big advantage over the chain stores. When customers are few and far between there is time for the proprietor to give each one his own individual attention.

People like this kind of service, especially in a drug store. They want their drugs *right,* and oftentimes if they are waited upon by a young clerk or by a new clerk, they do not feel sure they are getting just the same kind they had the last time.

Then, too, there is nothing like the attention of the proprietor himself to straighten out misunderstandings, and to prevent them. Clerks rarely have enough patience. If some one comes in and asks, as one of my customers did, for "Fly-bite food for babies," the clerk is apt to say, "We haven't got any," and then go behind the prescription case and laugh, rather than try to find out in a tactful manner just what is wanted and then sell it.

BEGINS SPECIAL SALES.

I had not been running the business very long before I began to want to have some kind of a special sale. I noticed that the city stores were all the time advertising something special, and I seized upon the occasion of a "teachers' institute," a good sized convention of school teachers, as my opportunity.

The night before the institute opened I distributed all over town a lot of dodgers, part of which were headed "Found" and part "Lost," and each went on to tell of a special sale of stationery for that week with a 5 per cent (!) discount.

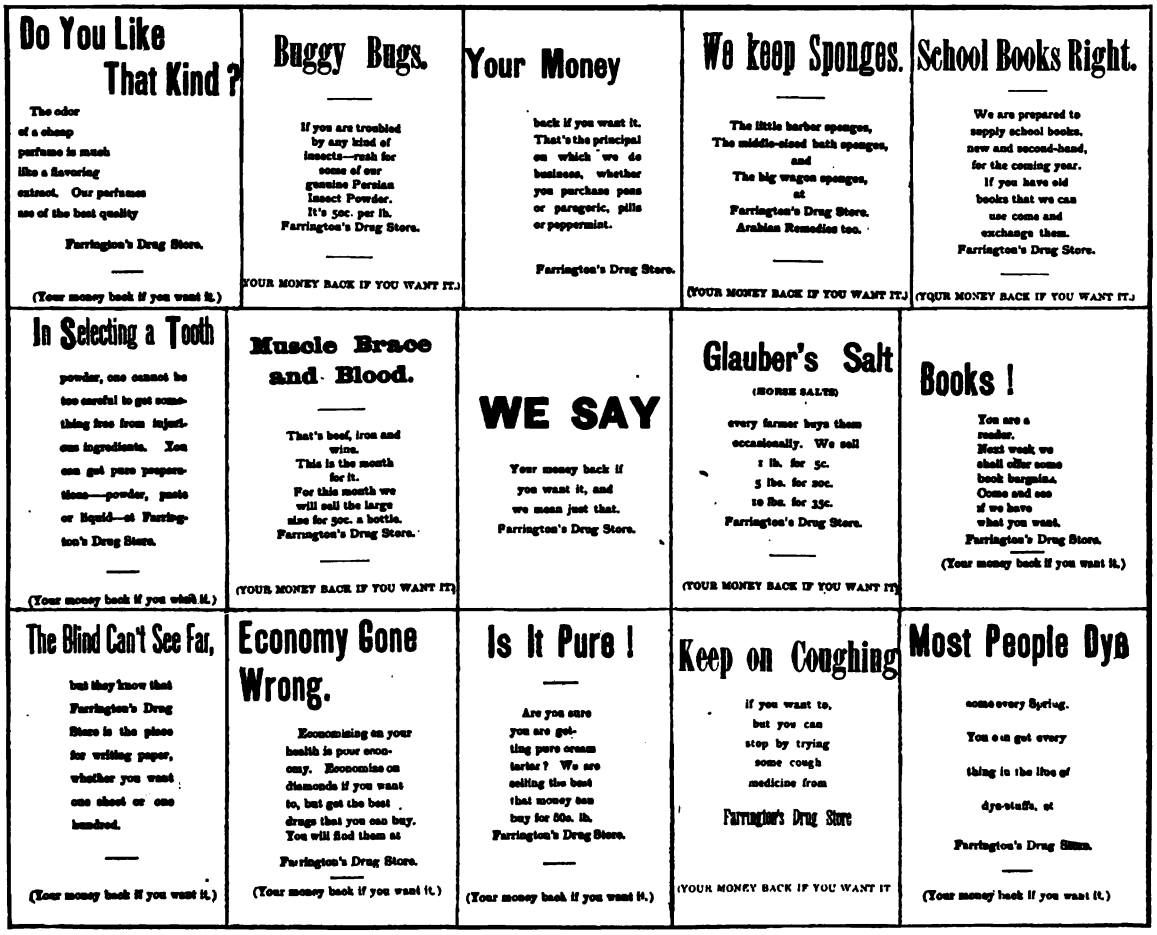
Needless to say, there was no great rush for that discount! I displayed the goods well and put up big cards in the windows, but I don't remember that any sales were made as a result of the plan—and yet I have no doubt that there were a good many people reminded of the store and drawn there for stationery some time because of that "sale," so while it was something of a joke on me, still it was a start in the right direction and its evident failure did not discourage me.

In this connection I might add that subsequent experiences and trials of various plans, when the annual school teachers' institute is held, have proved that about the only line that will interest them much at that time is cheap books. Stationery, confectionery, perfumery, toilet specialties and all the rest of the drug and stationery articles they pass by unheeded, but put a line of bargain books into the window and they will all stop and look them over.

I made it a point from the first to have something special doing whenever anything was scheduled that might bring a few or many people into town. In a small village the big celebrations are few and far between, but every little while there is something that brings a few people in from outside points, and they are pretty apt to wander along the main business street and look at the store windows and make a few purchases.

The principle of going after the transient trade in a small place is the same as in the city. The profit that comes from such business is so much "velvet."

The expenses of handling my business were pretty light in those days, and it is well they



A group of the small newspaper ads. written by Mr. Farrington when he began to push things. They are pretty good, but he tells how he learned a few things about writing ads. later on.

were, for a business whose receipts average perhaps ten dollars a day some of the time does not do well if handicapped by heavy expenses. In the first June that I owned the store I took in $281.47.

A WORD TO CLERKS.

In those days I was able to run the store without any clerk, doing all the work myself and calling my father in usually to stay while I went to my meals. There were plenty of days at that when I had abundant time to sit down back of the prescription case and read when I might better have been cleaning up the store or the stock. It took me a good while to awake to a realization of my opportunities, just as it does a good many boys. If there is one thing I would like to impress upon the youngster's mind as he starts out in the drug business, it is that he can accomplish wonders if he will try.

Just so long as the clerk is satisfied with being a clerk, and doing his work as it comes along, just so long he will advance only as his gain in actual years of experience advances him.

Take your own case—yes, you! You think you are giving your employer good service, and probably you are. You are doing what he hired you to do, and to that extent you are a successful clerk. I have no object in urging you to do more for your employer's sake. It is up to him to see that you earn your money and enough more to pay him a profit upon your services.

But on your own account—what do you want to do? What do you want to become? Are you doing anything to-day to fit yourself for that? If you want to own a store of your own, are you studying the methods of store management used by the men who are succeeding? Are you reading the trade journals and filing away in a book of clippings or in your head the items in them that will be valuable some day?

USING THE DRUG JOURNALS.

One of the first things I did was to look up the matter of trade papers and to subscribe to some of them, and then I took pains to read those papers because I believed that the people who got them out drew upon the best pharmaceutical brains in the country to make their papers worth reading.

Just as soon as I heard of the BULLETIN OF PHARMACY I subscribed for it, and I have never been without it since. It hits my case every month with ideas I can use—and it always has.

I did not stop with perusing the regular reading matter. I went right through the advertising pages, and in those pages I have found as much of value as elsewhere. I have picked up many new lines of goods in this way that I would not give up for several times the cost of the journal. The druggist who can't make it pay him handsomely to buy and read the trade papers is sadly behind the times, and needs them more than he realizes.

For the first year or two I did not succeed in boosting my business appreciably. My store was pretty small potatoes. The other fellows were getting the cream of the trade, though to be sure it was not very thick cream.

AS TO HIS CREDIT BUSINESS.

From the first I discouraged much credit business, and accepted that only from people considered as "good as the wheat." Furthermore, and it was a good thing, I needed the money so badly all the while that I was obliged to make prompt collections.

This very thing lost me a little business, because there are in every town a few families who think they ought to be allowed to run as big a bill as they like for as long as they like, merely because they are what we like to call "our oldest families." With me it did not make any difference how old a family might be if it could not pay its bills promptly.

I believe that more independence of this sort would result in a much more satisfactory condition of the average druggist's finances.

When a man buys goods from you or from me he owes us money. The money for them is ours and we are entitled to it. He has no excuse for being disgruntled if we ask for it, or even if we insist upon having it.

The cash basis is the right basis and the comfortable basis.

In the next chapter I am going to deal with plans that got the ball started to rolling. It is always harder work to get it started than to keep up the momentum after it gets going, but hard work has killed mighty few people—in the drug business or in any other.

(To be continued in February.)

A DEFENSE OF "COMMERCIALIZED" PHARMACY.*

By E. C. FINCH.

If we were to soliloquize as did my friend Hamlet, "To be or not to be," and finally decide to be strictly ethical, I am afraid we would not *be* very long. There was perhaps a time, a good many years since, when pharmacy was practiced on ethical lines, but I am glad I did not live in those days. The drug store was then commonly called an "apothecary shop," and I am informed by the journals and some of my muchly traveled friends that in England, Germany, and some of the other and older countries pharmacies are still run somewhat along those lines.

There seems to be a prevailing idea that those who conducted the old apothecary shops were more scientific than we are at the present time, but I am inclined to think that the people who cherish this notion are themselves living in the past, for I am not willing to admit that we are retrograding scientifically. I don't think there was ever an age when our profession was so far advanced scientifically as it is at the present time.

We, of course, have keener competition, and more of it than ever before. But I am glad to say this has had a tendency to elevate the profession as well as to sharpen our wits. Competition has made the competent man either post himself or seek new fields and pastures green, as 'tis a case of "the survival of the fittest."

Another consideration is that there was never a time when there was so much prescription business done as at present, although it seems to some critics that the profession is now commercializing itelf. There is no comparison between the present time and that a few years back when I first went into the business. The pharmacist then made nearly all his elixirs, tinctures, plasters, pills, etc., with no degree of certainty as to their strength, for he prepared them from such crude drugs as he happened to have on his shelf; or, if he purchased them from the jobber, they had never been assayed. We all know now that in order to get a product of the required strength, we either have to assay it after manufacture, or we have to use a drug that has been recently assayed, for even assayed drugs lose their strength after a reasonable length of time, and we have no certainty whatever of the amount of active ingredients unassayed goods contain.

It is not that we are less competent to make these pharmaceuticals than our forefathers were, for we are, and perhaps more so, but the manufacturing pharmacist has centralized this part of the business, making it possible for the druggist to buy standardized and assayed preparations almost as cheap as he could make them. By virtue of the volume of business done by him, the manufacturer is enabled to be much better equipped for such processes than the average pharmacist could possibly be. Furthermore, the druggist, by allowing the manufacturer to look after this branch of the business, has a chance to devote his attention to the front of the store (the place where he is most needed), and he also saves the salary of one or more expensive clerks. This saving alone will more than over-balance the manufacturer's profit on the preparations we purchase of him.

But since most of the particular and prosperous pharmacists are patronizing the manufacturer, there are a great many who claim that the drug store of the present day has evolved into a commercial proposition strictly. This I am not willing to admit or believe. As long as I remain in the business I intend to conduct my prescription department along purely ethical lines, no matter what the pressure of competition may be. I must admit, however, that I am in favor of commercializing the front of the store as much as possible. And why not? No matter what our business is, we have to pay the same rent, the same taxes, and put in the same number of hours, so why shouldn't we add to our shelves such articles of commerce as we are justified in carrying?

The dry goods store has branched out to

*Read before the Tennessee State Pharmaceutical Association.

such an extent that it is impossible to know what to name it, and the hardware store has sometimes developed into a drug store.

It is a well-known fact that if a pharmacist should try to conduct his business strictly along professional lines, he would not be bothered with it very long, for the high sheriff would soon have an inning, then the coroner, and finally the undertaker—for he would be a dead one, sure enough! And I am afraid we should be able to inscribe on his monument what a promoter did on a shaft down in Texas. A friend of mine had a splendid formula for an ague cure, but he had no money. So he took into partnership with him a hustling chap who had a few hundred dollars. My friend was to stay in New Orleans and make "West's Celebrated Ague Cure," and the young promoter was to be the salesman. The latter, being a versatile artist, could make signs almost at the rate of one a minute. He went through Louisiana and Texas painting ads. and selling the nostrum right and left. While riding along a road in Texas one day he came to a family graveyard. There was one fine, tall shaft which especially attracted him, and being quick to see a good thing, he got out his black paint and brush and painted on the shaft: "This man would not be here if he had used West's Celebrated Ague Tonic!"

The family sued the company, and my friend told me that the courts had never quit allowing damages. So we could easily inscribe on the monument of our brother who conducted a purely professional store: "This man would not be here if he hadn't been so ethical!"

A PHARMACY IN A PHYSICIANS' BUILDING.

That of R. A. McDonald in the Minahan Block, Green Bay, Wisconsin—Something of the Owner and How He Went After the Business of Physicians, Nurses, and the General Public.

By FRANK GANNON EBNER.

R. A. McDonald was doing a very fair drug business in a small Wisconsin town. But Mr. McDonald is one of those fellows who is not satisfied with doing a satisfactory business. He wanted a big trade. His former location lacked possibilities. So he looked for a better place.

In 1907 Mr. McDonald received a tip that a physician's office building was being erected in Green Bay, a city of 30,000, located in northern Wisconsin. He went to Green Bay, looked the field over, talked it over with a few influential men, and in July, 1908, launched an apothecary shop on the ground floor of the new building with a stock amounting to $8000. The store was fitted up with mission style furniture and everything was put in neat trim to inspire confidence.

The McDonald store is located on the ground floor of a handsome, white tile, six-story structure. The building is situated in the heart of the business district, within easy reach of the many physicians' offices, making it convenient to cater to prescription trade.

Mr. McDonald had his ideal set upon a prescription pharmacy. It was necessary to get the prescription business, and to get that patronage Mr. McDonald had to gain the confidence of the doctors. With that idea in mind, he called, personally, upon every medical man in and about Green Bay. He outlined his policy. He was sincere in his talk with the physicians. Mr. McDonald's policy appealed to them. A number of them were dispensing at the time. McDonald got busy. After three years of honest service, there are only two out of thirty that are dispensing their own medicine.

Outlining a policy and living up to it are two different things. Unlike many, Mr. McDonald made good on his assertions to the physicians on his first visit, and that is what has counted him a success in catering to the wants of medical men.

GAINING THE SUPPORT OF THE NURSES.

Mr. McDonald knew that the professional nurse had a great deal to say in determining where the prescription was to be filled. He

obtained a mailing list of all the nurses in his county. He wrote them a neat, typewritten letter on the establishment of a prescription drug store. He asked them to come to his store to enter their names on his nurses' directory.

The nurses' directory consists of a bulletin board with spaces for their cards. The board is divided into two parts, an "in" and "out" division. When the nurses go out on a case, they telephone or call at McDonald's and their cards are placed under the "out" division, and *vice versa*.

Mr. McDonald knew that the professional

R. A. McDonald, proprietor of the pharmacy in the Physicians' Office Building, Green Bay, Wis.

letters, of the establishment of a nurses' directory where they could obtain the services of a professional nurse. This plan made a decided hit, both with the nurses and physicians.

The nurses not only bought their supplies but diverted prescription trade to the McDonald store whenever they could.

HIS ADVERTISING.

Mr. McDonald's advertising centers about his prescription department. It dwells on the importance of quality in filling prescriptions.

Mr. McDonald believes in keeping his name before the people all the time, whether it be before a physician, veterinarian, dentist, nurse, or a layman.

He supplies the physicians with their prescription blanks. He submits several colors of a best quality paper and asks them how they want their names to appear and whether they want the name of a drug store printed on. Everything is left to the discretion of the physician.

Every Christmas he presents the medical men with something. It may consist of a hypodermatic syringe, a call list, a pocket leather prescription pad case, or something that will keep McDonald's name before the prescription writer all the time.

He supplies nurses with "record sheets." Each record sheet carries with it the McDonald name, so McDonald's name enters every home the nurse visits in the course of her work.

The newspaper, street-car, billboards, a monthly store paper called "McDonald's Hustler," all carry the McDonald message. McDonald also makes use of theatrical programs and lantern slides in driving home the reasons why they should deal at McDonald's drug store.

When asked what medium gave the best returns, he quickly answered: "McDonald's Hustler, our little monthly paper, I find the best paying advertisement."

The store paper is made interesting by virtue of its printed matter, which consists of jests, toilet suggestions, special sales and topics that appeal to the housewife.

Mr. McDonald winds up most of his advertising talks with the catch phrase, "If you can't come, telephone." There are mornings, at times, when it keeps two people busy answering the phone calls. He says:

"There are times when people want drugs in a hurry, and the telephone is the means of transferring the goods from where they are to where they ought to be.

"The telephone business must be backed up with good delivery service, or it's a failure, and all the advertising in the world will not make it pay."

Mr. McDonald has boys deliver goods on bicycles.

The fame of McDonald's as a prescription store has spread into the surrounding country until its prescription business has reached large proportions. He makes use of an envelope with the name "McDonald's Drug Store," Green Bay, Wis., marked RUSH for those desiring their prescriptions filled in

a hurry. All goods are sent C. O. D. As a matter of fact, there is very little credit business done in the McDonald store.

The prescription department occupies the rear part of the store. A small window in the center of the case admits a view of the workers. All prescriptions are filled by registered men, of which there are three. When a prescription comes in, the customer is given a check. The original check has three numbers, all alike; one check goes to the customer, the other is pasted on the prescription, and the last is placed on the package when completed. Whether the customer waits, calls, or has the package delivered, he gets the right one.

All prescriptions are filled precisely in conformity with the obvious intentions of the prescriber. If any article called for on a prescription is not in stock, the doctor is consulted and under no circumstances is substitution in any form tolerated by the rigid McDonald policy. All solutions intended for the eyes are filtered. Eye ointments are strained and placed in collapsible tubes. Every bottle or box is wrapped in white paper and sealed with sealing wax. Particular attention is paid to putting out neat packages.

Mr. McDonald advertises quality and makes good on his advertising copy by delivering the goods. Mr. McDonald spares no pains and expense in obtaining the best chemicals and pharmaceuticals on the market. Mr. McDonald is a quality man through to the backbone, whether it's in buying fruit syrups, stationery, or selecting help. Quality counts with him.

Mr. McDonald's first day's prescriptions numbered three. Now they reach the large sum of 45,000 a year. His sales amount to $40,000 a year.

An interior view of the McDonald pharmacy in Green Bay, Wis.

SICK-ROOM SUPPLIES.

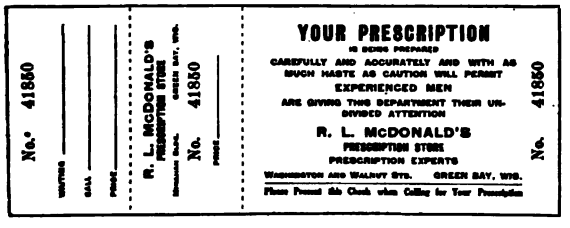
Mr. McDonald gets a big share of this business of the city because he carries the most complete line of good goods, and secondly, because he has a lady attendant, which makes buying more agreeable to those who would rather have one of their own sex serve their wants on certain supplies. McDonald furnishes the three hospitals of the city with drugs and sick-room goods.

All rubber goods are sold under a positive guarantee that they will give good service or can be returned. Of course, nipples, breast-pumps, etc., are not exchangeable for sanitary

reasons. All buyers are told so before the goods leave the store. "The customer is always right" is the attitude of McDonald, and rather than have a buyer leave the store dissatisfied, he makes it right. For instance, a short time ago a lady returned several nipples, saying that they were not the kind wanted. Mr. McDonald explained the policy of the house regarding the exchange of rubber goods, tore up the nipples in front of the customer and gave her what she wanted.

SODA TRADE.

Notwithstanding the fact that Mr. McDonald centers his advertising on his prescription department, he gets a good share of the soda business. In fact, he does the best soda business in the city. Cleanliness is spelt



Prescription check used in the McDonald store.

in everything you look at in the McDonald store; from the door-knob to the money they hand out in change.

Every drink is served ice-cold in thin glasses previously sterilized with boiling water. Every utensil around the soda fountain is sterilized before a second usage. Every soda concoction, from a lemon phosphate to an egg malted milk, represents the best quality of material served, as he states in his little soda menu, "with that touch of loving care." He puts out a two-paged little brown menu booklet which is the best of its kind. It covers the complete line of soda concoctions and is printed in a way that will make any mouth water. The booklet is within easy reach of any one who happens along at the fountain.

The fact that he made $2500 during the season of 1910 on his soda fountain is an index to the business done.

A good line of cigars is handled, but the trade is not encouraged, largely because of the large women patronage the McDonald store enjoys.

The candy business in the McDonald store is limited to a box trade. He enjoys a good business in candy. Mr. McDonald does not believe in sticking to one line of goods, but changes often for the reason that people tire of the same kind.

Owing to a large women patronage, McDonald enjoys a good toilet trade. His store being located close to the city theater, he gets a big share of the theatrical trade in grease paints and general toilet articles.

The working force consists of the proprietor, two registered men, one bookkeeper, one soda dispenser, and a delivery boy.

McDonald's name has never been attached to any patent-medicine advertisement, nor has he ever handed out any such advertisement. He does not allow any patent medicine in his window, nor does he display any signs for cure-alls. This iron-clad policy of the McDonald store has gained for the man behind it a prestige that means much to him in his business.

There is no counter-prescribing.

Those seeking advice for ailments are referred to their family physician. Prescriptions are not refilled unless otherwise specified by the physician.

To convey the latter message to the people, use is made of a sticker which is placed on every prescription which is filled.

The sticker cautions the patient not to have the prescription refilled unless otherwise specified by the physician.

Everybody is given exactly what he calls for. Courtesy is the password among the workers of the store when dealing with the public. Courtesy is long remembered even after the price of the goods is forgotten. Courtesy has been a leading factor in enriching the trade of this store.

R. A. McDonald, who has popularized this drug store, is a genial, good appearing chap of about thirty-five years. He belongs to several fraternal organizations, goes to church on Sundays, and stands high in the esteem of his fellow-men. He is on the job every day, but manages to get away long enough to look up a new doctor in the town and convert him to the McDonald faith. His heart and soul are in his work. The very store, the clerks, the advertisements all reflect the brilliancy of the personality behind the institution.

AN UNUSUAL WINDOW DISPLAY.

By J. EARL TAYLOR,
Gridley, Illinois.

This trim has one feature which I can claim is original, namely, the background. It may be used as a setting for any variety of things other than the rubber goods and sick-room supplies shown here. If I remember rightly, I never saw such an arrangement before.

The top of the background is formed by puffing white tissue-paper and allowing it to drape as shown in the illustration. The back of the window is covered with heavy white paper. With a heavy crayon outline the tree and branches on the heavy paper. Take a sharp knife and cut around the outline. The tree effect is easily formed, presenting a very realistic appearance to the onlooker, both near by and at a distance.

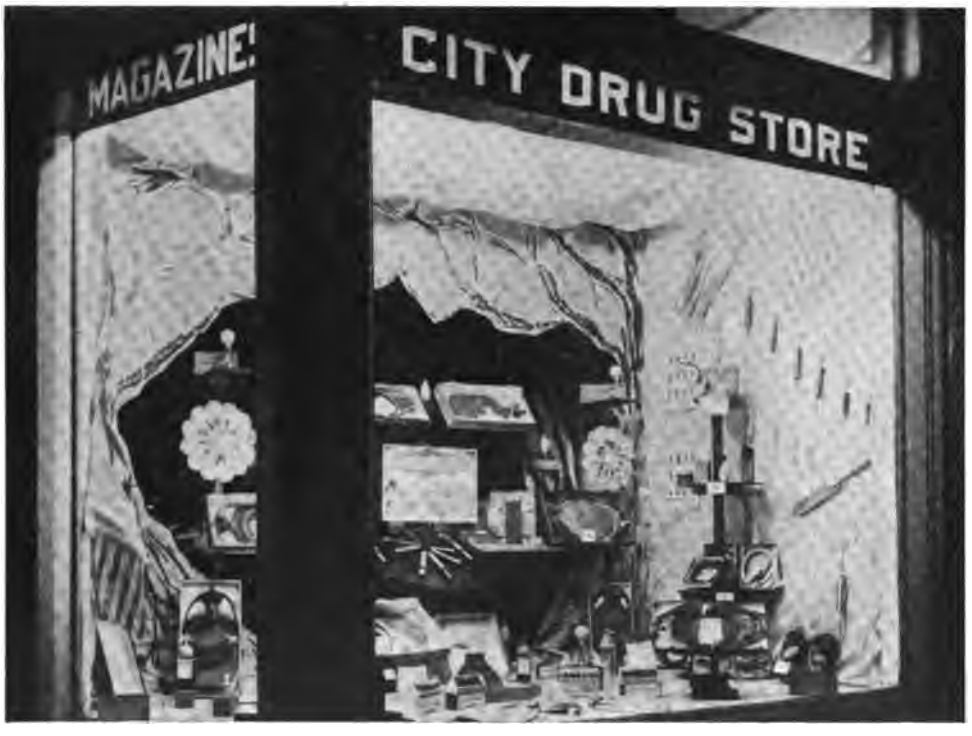
Next obtain a can of black paint, dip a piece of cotton into it and proceed to daub over the outline with the wet cotton, using a drawing motion. A bark effect is easily formed.

Over the back of the trim cover the outline with, say, green tissue-paper. The tree is now quite real and the effect is certainly fine. Try it and see.

The side wall of the trim is covered with white tissue-paper, and a drape of the grand old flag adorns the extreme top.

On the other side the syringes are arranged in the order of size and have price tags attached in full view. Baby pacifiers are set in the extreme back of the trim. The base of the window is white, to carry out the general scheme.

The articles exhibited are hot-water bottles, fountain syringes; ear, ulcer, nasal, and bulb syringes; breast shields, nipples, breast pumps, medicine droppers, throat bags, ice-bags, eye pipettes, etc. These are all neatly arranged to show to the best advantage over "Onken Younits" that we purchased last year from the makers in Cincinnati. Price tags were good and clear. Almost any arrangement can be made over the "Onken Younits." They are certainly worth the money. We are at present using this trim, and the sales are very satisfactory.



A POTENT TESTIMONIAL.

It Gave Success to a Liniment that was Headed Straight for the Patent-medicine Graveyard—The Whole Story.

By ARTHUR L. BUZZELL.

One who depends on his wits and a rented typewriter for his daily bread is sometimes at a loss for a theme on which to employ such a combination. For days the air seems sterile of story essence, and meditate though he may, the luckless attic-dweller is left stranded on a barren bar of uncertainty, to wear out his spirit in vain endeavor. When such calms strike, it is my custom to cut loose and whistle lustily for a wind; in other words, to hustle around and see what I can find. On Wednesday of last week, while on such a mission bent, I chanced to meet Dr. Pemlico Knox, who took me over to the Occidental and introduced me to a friend of his, a Mr. Harris. The three of us sat at a small table in the Peacock room and exchanged pleasantries over a weak brew for a time. Then Dr. Knox, pleading pressure of professional business, took his leave.

"A natural born advertiser," I ventured, nodding my head toward the retreating figure.

"Not necessarily," corrected Harris. "He has made the right moves, to be sure; but he may have made them accidentally."

"To my mind, that would be impossible," I combated. "What happens is the result of something; the wise man, or the successful man, in other words, looks after the something."

"Or has it looked after him, by accident? But let me illustrate. Have you the patience to listen to a long-winded and not very interesting story?"

My heart bounded loudly, almost audibly. Listen to a story! Would I! Visions of another $250 payment on my Mexican plantation stock dimmed off into azure hues. I assured Mr. Harris that nothing would please me more than to give rapt and close attention. Glancing at the clock and remarking that there was just about sufficient time if he hustled, he began. As nearly as possible I will follow his faultless style.

"Fifteen years ago," he said, "I was a beardless and anemic drug clerk, and through an advertisement in a daily paper I secured employment with a man by the name of Frederick Donnelly—F. H. Donnelly.

"Like most men who run drug stores, Mr. Donnelly never got the idea of 'putting out a patent' quite out of his head. At times the obsession seemed to lie dormant like a winter snake, but later it would break forth again with all-consuming intenseness. Time and time again he had tried to launch a Peruna, a Wizard Oil, or a Jayne's Expectorant, and each time had sworn by the moon, the soft east winds, and several myriads of pale blue stars that he would never sink any more money in that particular manner. But with periodical frequency, a mysterious something seemed to breathe a disquietude into his soul which could be antidoted in no other way but the thumbing of printer's ink, the studying of label catalogues, and the estimating of a vast fortune on a corner of the desk blotter. Such orgies often ended in an addition to the drug family, and for days, perhaps weeks and months, Mr. Donnelly was one of the busiest men on the western hemisphere.

"On the same day that I entered his employ, Mr. Donnelly launched Kilpatrick's Liniment. Late in the afternoon of the day preceding my arrival he had received a large consignment of cartons and labels from Chicago, and most of the sleep of the night had been sacrificed that the matter of assembling what he sanguinely believed was destined to become a celebrated liquid, and its accompanying bottle, cork, label, wrapper, and carton, might not be delayed a moment longer than was absolutely necessary. A morning sunbeam, slanting carelessly in through an east window, added an intenser yellow to the goldenness of a row of 'Kilpatrick' standing in military formation on the top of a showcase.

"Mr. Donnelly cuddled his latest progeny with a parent's fondness during many hours of the ensuing day, talked 'Kilpatrick' incessantly, and sold one bottle. The following

day he sold one, the following day one, and the next day none. He then bought a small square of space in the evening paper and launched what he denominated his advertising campaign. A few bottles of 'Kilpatrick' were sold as a result of newspaper publicity, but the daily balance was far from gratifying.

"He had contracted for the space in the daily paper and felt that it must be made to yield all it would in the way of returns. To increase its potency he mailed out a hundred dollars' worth of what he called 'back-ups.' Yet in spite of all his efforts, the waning of the first gross of 'Kilpatrick' found him $300 to the bad. This showing troubled him greatly, and his enthusiasm began to go the way it had often gone before. He ceased to dream 'Kilpatrick' and merely talked it. However, as a stand in the last ditch, he resolved to amass a bunch of testimonials, have them printed in neat folder form, and have these folders mailed out also, aiming to place one in each family in the city and adjacent country districts. He had read somewhere that a testimonial often took the message to Garcia when other forms and fashions had failed.

"He needed to consult no record-book to ascertain who had bought 'Kilpatrick'; the tablets of his mind carried the names, indelibly impressed. To each purchaser he sent an appeal for a word of commendation; and here again he met with disappointment, for not a soul responded. Nevertheless, being a man of determination, he did not give up. Setting his jaw, he went after the testimonials personally, and in the end accumulated thirty-seven, all written by himself and signed by the purchaser. These were edited carefully, turned over to the printer, and in due time the neat little booklets were delivered.

"Now, I am just an ordinary individual, exempt from the workings of no fundamental law, and I am free to confess that my employer's attempt to hitch his cart to the tail of a strange god had produced in me a condition little short of nausea. There is something in human nature which causes the onlooker to ridicule the efforts of any fellow mortal who strives to put something new into the world. A feeling of resentment wells up and gives birth to an irresistible desire to make the way of the transgressor hard. Let this be the excuse, as far as it will carry.

"To me fell the task of mailing out the booklets. It was a disagreeable undertaking. Had I had my choice I would have much preferred to have made a half-million zinc valerianate pills or to have stocked an arsenal with aloes horse-balls. I was supersaturated with disgust and hoped never to hear or see the name 'Kilpatrick' again, outside a history of the Civil War.

"The little pamphlet was altogether too dull, anyhow. The testimonials were all alike, worded, perhaps, a little differently, but nevertheless all alike. They all began: 'Mr. Frederick Donnelly, Dear Sir: I have used your celebrated,' etc., etc. Or, to vary this somewhat, about every third number led off with 'Having used one bottle of your celebrated,' etc., etc. Not a glint of humor, a convincing clincher, or a point of originality in the entire layout.

"I began to revolve the subject of the testimonial in my mind. It seemed to me that the game must be nearly played out—or at least played so long that a testimonial must be out of the ordinary to gain worth-while attention. I wrote a few and tore them up; and then suddenly an idea occurred to me, an idea which caused me to sit back, stroke my chin with a forefinger, and grin.

"The fate of 'Kilpatrick' lay entirely in my hands. Unseen and unsung, I could give it a whack over the head with a testimonial which must its quietus make. Why not do it and end its agony? Why not turn humanitarian and save my employer, who at heart was by no means a bad man, from a fate worse than death?

"Far into the night I labored and perspired, but in the end I conquered. The next morning I had my testimonial printed on a sheet of proper size to make a nice little insert; and during the next few days I mailed out the booklets. The thirty-eighth testimonial ran like this:

Good Mister Frederick Donnelly, Sor:
In answer to yer letter
I take me pen in hand to say
That Pat, I hope, is better—
He's dead.

Yer medicine no doubt's all right
For a certain kind of caseys,
But Pat he couldn't stand it, quite,
It knocked out all his braces.

"Kilpatrick's Liniment" in black—
Faith, that was on the label,
And to kape its word it surely proved
That it was amply able.
Oh, werra, werra.
—BIDDY O'BRIEN.

"Did 'Kilpatrick' die also? It did not. During the next three weeks we sold fourteen gross. Man after man and woman after woman brought in the insert, passed it over the counter with a face cracked from ear to ear and called for 'a bottle o' that stuff.' The humor appealed to them, and 'Kilpatrick's Liniment' was headed straight for the *Bookman's* list of the ten best sellers. We found it absolutely impossible—but, pardon me. There comes the man with whom I have an appointment; the man for whom I have been waiting."

"One moment, please!" I cried, grasping him by the coat-sleeve. "Your unfinished sentence implies—"

"That for a time we found it absolutely impossible to—"

"And then?"

"Donnelly fired his advertising man. But permit me to introduce Mr. Hendricks."

Five minutes later Harris and Hendricks were banking for shot. And five hours later I dropped this story into a corner mail-box.

"MY BEST ADVERTISING SCHEME."

One Druggist Hits upon a Good Plan of Developing a Demand for His Own Toilet Lotion —Another Consigns Goods Systematically to His Customers, Collecting Later for the Articles Used—How These Ideas Worked Out.

DEVELOPING A SALE ON A TOILET LOTION.

BY STANLEY CAIRNS, FOREST, ONTARIO.

Your "Best Advertising Schemes" are very interesting, and I wish to describe one we have used to push our own preparations by forcibly drawing to the minds of people the prospects of a bargain.

The scheme centered about a toilet lotion which we had recently made up and put on the market. We were confident that our product was as good as any. The package was very neat, consisting of a special shaped bottle with an artistic label and capping. Nevertheless, we saw it was going to sell slowly with the aid only of newspaper advertising and our pushing it behind the counter. So we had 1000 cards, about the size of a postal card, printed, announcing that each one was worth 10 cents. Rather, we said that in order to introduce this new toilet lotion to the public, we would give any one who signed the card and presented it at our store a full-sized 25-cent bottle of our toilet lotion for 15 cents. We made it plain that this offer was good for two weeks only, or as long as the goods were displayed in our windows.

We had a facsimile of the above card printed in both local papers, permitting the readers to cut it out. This we did more for the advertising and to catch the country people. We allowed only one bottle for each family. We made an enormous quantity of the lotion, arranged a handsome display of it in our window and part of a show-case.

It is surprising how the majority of people will take advantage of a bargain, however small it may be. I am always ready for one myself, and storekeepers everywhere say that the wealthy people are keener bargain fiends than even the poorer class.

We placed our cards in plain, unsealed envelopes and mailed one to the lady of each family in town. The result was very gratifying to ourselves, for at the end of two weeks we had sold 462 bottles. Nearly one-half of the cards were returned. Now the whole cost of each bottle when sold did not amount to 11 cents. So we had quite a little money to show for our two weeks' work. But when we started out we did not intend the scheme should be a money-maker. We just wanted to break even. Needless to say, we have sold hundreds of bottles of toilet lotion since at 25 cents a bottle.

If we had continued to advertise in the papers instead of sending out cards; or if we had marked the price 15 cents in our dis-

play, I don't suppose we would have sold a hundred bottles. But placing the card in their hands made them think, "This is worth a dime, and as I need a lotion I may as well get it." So they bought it, and when it was satisfactory they bought more. We could often make a sale by merely mentioning the bargain to a customer while shopping, and thus interesting him.

We have used the same scheme for several other preparations of our own, and one that was most satisfactory was a "condition powder" for animals, a regular 50-cent package which we sold for 30 cents. Nearly every farmer for miles around secured one.

In conclusion, I may say that whatever preparation of your own you are trying to market, make sure that it is as good or a little better than those being sold already. A customer can be fooled once, but not twice.

We also find that a neat and attractive package is necessary for a quick sale. Most people buy a specialty the first time on the strength of the external appearances, but the quality of the goods determines the second purchase. A handsome label, of course, always gives a good impression.

Another thing, we never advertise our goods as being of our own manufacture. Rather, we give our customers the impression that we are a favored agency for distribution of certain goods. We find that we cannot push our own make of preparations as well as those made elsewhere. The customer sees our purpose, which is to make more money for ourselves. Most people, or rather a lot of them, have the impression that if a product is made in Toronto or a big city, it must be good. They have in mind the immense factories seen, for instance, on the front of Peruna calendars as being the source of the goods.

A NOVEL PLAN FOR PUSHING SEASONABLE GOODS.

By O. P. McPherson, Gloster, Miss.

We all admit that to push an article it is necessary to keep it before the people. The question then arises: "How can that be done to the best advantage?" I found this plan worked nicely, and it may prove beneficial to others.

All druggists have more or less dislike for ing called out of bed on a cold, rainy night. So one cold, rainy afternoon when business was slack, I conceived a plan whereby I could avoid being summoned out that night for any cases of croup or cough that such an evening usually brought forth. Calling my clerks together, I set them to wrapping up bottles

O. P. McPherson.

of cough medicine of my own make. In each package I enclosed a note:

Dear Madam: Realizing that this is an excellent night for the children to suffer with coughs and croup, I am sending you one of our bottles of cough medicine. Please put in a convenient place, and if you have an occasion to use it, do so. Otherwise, let the package set there in your house until I send for it. Or you may return it. As a method of keeping our records straight we have charged the medicine to your husband's account, and when it is taken up we shall give him proper credit.

Thanking you in advance for the kindness, we are,
Yours very truly.

Well, we sent out three dozen bottles that afternoon. Since it was only a few days until the first of the month, we delayed sending back for the goods until our collector had an occasion to go into that neighborhood. When he went, we had him take along a basket upon which was written Cough Syrup. But to our surprise, when he came in that evening, he had only one bottle of medicine returned for credit. However, in the collection of accounts we found some who thought we intended giving them the medicine. In such cases we compromised on a half-price. We sold three dozen bottles and created a nice

demand for our cough cure. And I was not called out that night for any cases of croup, either!

The plan worked so well, I determined to try it more scientifically. So I took empty cigar boxes, cut them in shape to make a pretty decent little case or box, and asked permission to tack one in each home near the telephone. On the front of each box I wrote: "For Results, Phone 85," and each month I would watch the weather, time, places, and social functions, and have my corps of boys, dressed in white and blue, make the rounds and leave something new and needful in each box, after taking up the old articles, if any was left. If the weather turned cold, I sent cold cream, cough syrup, etc. If there was an entertainment, I sent face powders, perfume, etc. If it was Saturday evening, I sent toilet soap or shoe polish, and so on.

Our sales amounted to $85 the first month on this plan alone. The expense was about ten per cent of the sales. And while these little fellows made the trips, we always had them take from the store all surplus advertising matter for the children. I found it was a magnificent plan for unloading any article that was not staple and was liable to become stock worn.

A TALK ABOUT BUSINESS BUILDING.

By A. F. SHELDON,
Formulator of "The Science of Business Building" and Editor of *The Business Philosopher*.

An important success injunction is, *Know the other fellow!*

Thousands of dollars have been made by knowing how to handle the other fellow.

Thousands of dollars have been lost by not knowing the other fellow and by putting him in the wrong place.

Thousands of dollars have been expended by fond parents in their attempt to make doctors and lawyers of sons that nature never intended for such professions.

Thousands of hours of honest effort have been wasted by those who have been advised to go into lines of business for which they had no ability.

Thousands of lives have been ruined by persons of jarring temperaments marrying.

Thousands of parents have quarreled with their children and turned them adrift—simply because they did not understand their children.

Thousands of children have quarreled with their parents for the same reason.

Thousands of men on the road fail as salesmen simply because they don't understand the other fellow.

Thousands of merchants become bankrupt because they do not understand men and women. Instead of securing and retaining patrons, through their want of tact they lose those who come to them with their trade.

I put the question to you, Mr. Employer: How can you handle the men under you if you do not understand them?

I put the question to you, Mr. Salesman: How can you sell goods to persons you do not understand?

Since the greatest statesmen and the greatest professional men owe their success largely to their skill in handling men and women, can you afford to be without this knowledge?

Can directors of banks and railroads and corporations, in whose power it lies to select men for executive offices, afford to put the wrong man in the high place?

Such a mistake may involve a railroad or corporation in bankruptcy because of the incompetency of the man selected. A man may be elected president of a bank, who is by nature a defaulter.

There was an excuse for this before character analysis had become a science. Now, however, this science has been formulated and developed to a high degree of accuracy by Dr. Katherine M. H. Blackford, of Boston. The man who would be progressive must master it to keep up with the age.

There is a story told of a doctor being

called to treat a shoemaker who was thought to be dying. The shoemaker craved salmon. The doctor thought the man was in such a desperate state that he might as well let the fellow have what he wanted, as at the worst the salmon would kill him a few moments earlier only. However, to the doctor's surprise, the salmon cured him.

Later the doctor was called to cure a blacksmith suffering from the same complaint. As the salmon had been so efficacious in the case of the shoemaker, the doctor thought it would be equally so in the case of the blacksmith. The result, though, was different. The blacksmith died. So the doctor wrote down in his memorandum book: "Salmon cures dying shoemakers, but not dying blacksmiths."

"What is sauce for the goose is sauce for the gander," is not true in the business world. You can't cure the blacksmith with the same medicine that cures the shoemaker.

Different temperaments must be treated differently. Different methods of appeal must be made to them. The same things strike them differently.

If all men were alike, salesmanship would not be an art.

You know, you must handle the quick-tempered man with gloves; the lethargic person you must urge to action. This much the novice knows. But mankind is not divided simply into the quick and the slow. There are many types and variations.

The art of analyzing character scientifically is not as simple as the alphabet. Before you can judge a person you must take into account his coloring, the shape of his features, his manner, the tone of his voice. In fact, quite a few little points that only the student of human nature can know must be remarked. You must be able to do it quickly, too.

The value of such study I am sure you must feel. If you are looking for commercial or professional success master it. It will repay you largely.

Equally important is another success injunction, *Know your business.*

This means more than know your job, though you should make sure you know that first. After that, however, you should get busy, and know the job above yours. Yes, even the job above that. For the fellow just above you may not be able to fill the job above him. If you can, there is your chance.

While it is *the doing* that counts in the *battle for success,* it is not the doing that starts the *battle for success.* It is your preparation to do the things that should be done when the opportunity arrives that enables you to "make good" at the supreme moment.

Make the world need your service, and the world will pay you for your service. The more you make the world need it, the better it will pay you.

Who is the man who is always looking for a job?

The efficient man or the inefficient man?

Is it the fellow who brings in the weather report, or is it the salesman who hustles and gets the orders? Is it the bookkeeper who strikes his balance "first pop," or the fellow who adds the year of our Lord in his columns and then takes a week to discover the result of his mind-wandering? Is it the aspirant for histrionic honors who thought "shuffling off this mortal coil" in Hamlet's soliloquy meant "to take off your clothes," or the actor who has mastered his art to perfection—the Garrick, the Siddons, the Booth, the Bernhardt, the Irving, the Mansfield—that takes the world by storm?

The man who takes the world by storm must be able to *do something worth while.*

Is it the railroad clerk "who gets his traffic charges mixed" and charges you passenger rates on a car-load of pigs, or the Harriman or the Hill, who masters railroad technique to perfection, that becomes the president of the road?

Is it the one-hundred-and-fifty-words-a-minute stenographer or the graduate of the "four weeks' course in shorthand," whose notes are as undecipherable to him as a chop-suey bill of fare in original Chinese would be to us, who is always looking for a job?

Why are so many men always looking for a job? Why are not more filling *the* job?

I will tell you the reason. It is because the world is always looking for *competent service.* It is not going with a searchlight looking for the man who wants a job—but the man who can *fill the job* is always *sure of the job.* The job wants him—more jobs than he can fill. Job-hunters are not job-fillers, and job-fillers are not job-hunters.

To be a *job-filler,* you must be a man whose positive or success qualities are developed. The world doesn't want sick men, but well

men; not moral wrecks, but reliable men; not timid men, but bold men.

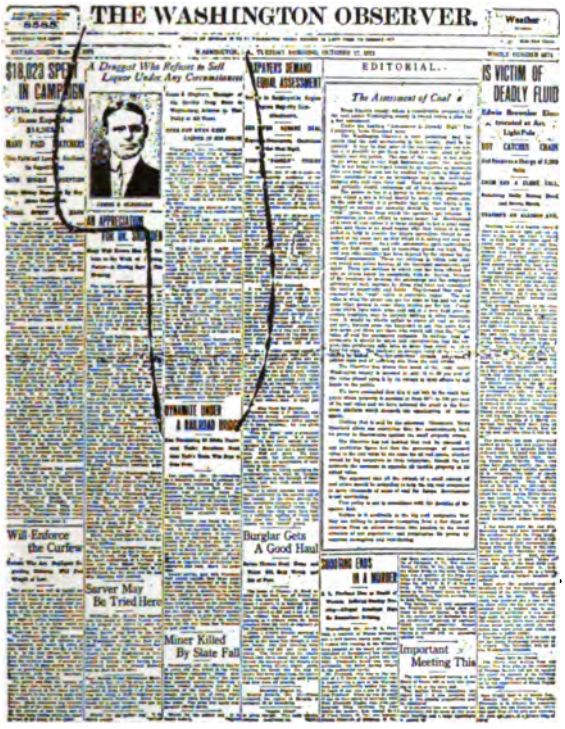
Obey the laws of health; develop the powers of your mind, *your thinker, your feeler, your rememberer.* Give these three the proper exercise, and the world, because of the *efficient service* you can render, will recognize you as a competent man. Then develop your *"imaginer"* and your *"willer,"* and it will recognize you as an exceptional man—a man of *initiative.*

You will stand at the threshold of Success.

"WE SELL EVERYTHING BUT LIQUOR."

How a Waynesburg, Pa., Druggist Has Made this Slogan Tell in Bringing Him Reputation and Support in a Locality where the Saloons have been Voted Out.

James S. Gleghorn, of Waynesburg, Pa., is a druggist who has made himself quite famous locally by refusing to handle liquor in any form and for any purpose. He displays a sign conspicuously in his store bearing this legend: "We Sell Everything but Liquor."


THE WASHINGTON OBSERVER.

Weather

$18,023 SPENT IN CAMPAIGN

A Druggist Who Refuses to Sell Liquor Under Any Circumstances

EDITORIAL

The Assessment of Coal

IS VICTIM OF DEADLY FLUID

Will Enforce the Curfew

Server May Be Tried Here

Miner Killed By Slate Fall

Burglar Gets A Good Haul

Important Meeting This

Front page of the *Washington Observer* containing the interview with Mr. Gleghorn printed in a conspicuous manner and accompanied with Mr. Gleghorn's portrait.

Waynesburg, and the near-by town of Washington, are in "dry" territory, and the liquor drinker, denied satisfaction in saloon or hotel, brings pressure to bear upon the druggists, who are supposed to sell intoxicants for legitimate medicinal purposes only. Thus an unfortunate situation has arisen like that which has been witnessed all over the country during the last few years with the spread of the temperance movement. It is in order to keep his own skirts clear, and to prevent any stigma from attaching to him, that Mr. Gleghorn has refused to keep liquor even for dispensing on prescriptions. And he is clever enough to make some advertising capital out of the conditions so that the public may know where he stands.

Recently the *Washington Observer* sent a reporter to interview Mr. Gleghorn, and the resulting article, printed on the front page of the paper, may be seen in our reproduction, with Mr. Gleghorn's portrait embellishing the story. The published interview was as follows:

Waynesburg comes to the front with a druggist who absolutely refuses to sell liquor under any circumstances. This druggist is James S. Gleghorn, manager of the Quality Drug Store.

On entering the Quality Drug Store one is greeted with the conspicuous sign: "We sell everything but liquor."

This sign means exactly what it says, as not even a physician's prescription is sufficient to produce the "goods," for liquor is not even kept in the store.

In discussing the question of liquor Mr. Gleghorn said to a representative of *The Observer:*

"I think it is best not to handle liquor in any form—not even for medicinal purposes—because a druggist who sells liquor even on a doctor's order furnishes the public a chance to give the druggist an unjust reputation.

"I think if the public must have some place where it can purchase liquor it should furnish that place—but it should not be the drug store. It is my opinion that druggists would do more business and make more money if they would let the rum business alone and devote their time and energy to honest efforts along other lines.

"The illegal selling of liquors is just as bad as the illegal selling of narcotics, and with the prohibition craze sweeping the country, all eyes are turned upon the druggist, especially in dry territory, and no druggist who values his reputation can really afford to handle it. It is advisable not even to dispense it on prescription for strictly medicinal purposes, as the medicinal value of liquor is decidedly overestimated.

"It is this particular feature of our business which is mainly responsible for bringing odium and disfavor upon our profession in dry territory, for unfortunately the world does not judge people or a profession by its highest type, preferring to cast the lot of the whole with the few, which is entirely wrong and unjust, as there are thousands of honorable, upright, conscientious men engaged in the practice of pharmacy, and it is but a small minority who indulge in this debasing and nefarious practice that brings the entire profession into disrepute."

Another Washington newspaper, the *Reporter,* noticed the interview in the *Observer,* and published an editorial on it under the title of "A Model Drug Store." Mr. Gleghorn was lauded for his honorable attitude, and the dignity of true pharmacy came into its own in gratifying measure.

From a personal letter to the BULLETIN OF PHARMACY, describing the situation, Mr. Gleghorn has these things to say:

"I have been endeavoring to show the people since coming here that it is not necessary to sell liquor in order to make a success of our calling, and that a druggist is on a higher level than a saloon-keeper. I am forced to admit it has cost me money to carry out this idea, but the gradual growth of our business shows that we are winning the fight. My efforts are being closely watched, and now the newspapers have taken up the subject, as you will note by *The Observer.*

"I tell you what, the BULLETIN OF PHARMACY has taken the right stand about selling liquor in drug stores, and I feel sure you would take a still firmer one could you but meet conditions face to face as they exist in dry territory such as we have here. This store, before I bought it, was a noted booze joint. Ladies scarcely ever traded here, but to-day, in less than a year and a half, we have a very exclusive trade, and most of our customers are women at that. This is the third time I have taken such a store and turned it into a legitimate pharmacy, but I have decided that it is the last time I shall ever attempt such an undertaking. A fellow has a double job on his hands, you see—that of living down the past bad reputation of the store, and also that of building up a new reputation, which in dry territory is no easy matter, I can assure you.

"I am not a temperance fanatic at all, and I have no objection to a man taking a drink, providing of course he knows how to handle it, but I do think that the spread of the temperance movement is working untold injury to our calling. Unfortunately there are always those who are willing to take advantage of such a situation for personal gain, regardless of its moral effect on themselves or their calling. The consequence is we are made to suffer as a profession for the failings and shortcomings of a few. It is and always has been so, and that is why I think our associations should go on record as being opposed to the liquor traffic and to those members of the calling who are in the drug business mainly for the liquor end of it.

"I have so often heard things that cast disfavor on our calling, even from the pulpit, that at times I am almost ashamed that I am a druggist! To my mind this is a serious question and one that will have to be settled either one way or the other by every druggist all over the country, but the question that concerns us most is: What kind of a stand will the majority take? The stand we should all take is to refuse to handle the stuff—in fact, the only thing left for us to do is throw it out entirely.

"This is the very thing I have done. I don't believe in waiting for the other fellow to act—I act for myself."

The New Elements.—

Sir William Ramsay says that the discovery of radium and radioactivity has indicated the existence of no less than 26 elements hitherto unknown. Besides the new gases, helium, neon, etc., there are a number of elements which are so unstable that their properties have not yet been determined. Considering the time in which an element becomes half-changed into other bodies, one of these new elements has a half-life of 3½ minutes, another 19 minutes, another 27 minutes, another 2½ minutes, a fifth 4 days, a sixth 5 days, a seventh 40 days, an eighth 16½ years, and radium itself has a half-life of 1760 years. The difficulty of studying elements which change into something else in a few minutes is apparent. Probably all of the new elements are derived from uranium, which has the highest atomic weight (238.5) of any known element.

DOLLAR IDEAS

MR. MINTON'S FORMULA FOR BASHAM'S MIXTURE.

P. L. Stanton, Jamestown, N. D., says that the following formula of Basham's mixture contributed some time ago to this department by P. I. Minton does not make a strictly U. S. P. preparation:

	Cc.	Cc.
Ammonium carbonate	12.5	6.25
Acetic acid*	280.0	140.0
Tincture of ferric chloride	20.0	10.0
Simple elixir	60.0	30.0
Glycerin	60.0	30.0
Aqua q. s.	500.0	250.0

To this criticism Mr. Minton replies: "I surely intended acid acetic *dilute* to be used in my Basham's formula. This mistake should be corrected. The formula then yields a product that is *strictly* U. S. P. as may be seen from the following comparison:

U. S. P. FORMULA.

Tincture of ferric chloride	20.00 Cc.
Diluted acetic acid	30.00 Cc.
Solution of ammonium acetate	250.00 Cc.
Aromatic elixir	60.00 Cc.
Glycerin	60.00 Cc.
Aqua enough to make	500.00 Cc.

MY QUICK FORMULA.

Ammonium carbonate	12.50 Cc.
Acid acetic diluted	280.00 Cc.
Tincture of ferric chloride	20.00 Cc.
Elixir aromatic	60.00 Cc.
Glycerin	60.00 Cc.
Aqua enough to make	500.00 Cc.

"By comparing the two we find that solution of ammonia acetate is 5-per-cent ammonium carbonate in diluted acetic acid. Therefore in the 500 Cc. of Basham's mixture there should be 12.5 grammes of ammonium carbonate as per my formula. Five per cent of 250 Cc. equals 12.5 grammes. The 250 Cc. of diluted acetic acid contained in the solution ammonium acetate, plus 30 Cc. in the U. S. P., equals 280 Cc. as in my formula. By simply figuring out the amounts it surely can be seen that the two formulas are exactly the same. The only difference is in the combining of ingredients."

A PRESCRIPTION RECORD.

H. F. Goodrich, Anoka, Minn.: Customers who maintain charge accounts frequently give trouble when settling for prescriptions, claiming that the goods charged must have been for some one else as they did not use any medicine at the time. Most of these complaints can be easily settled if, when the prescription is charged, the number is noted at the same time. Then when the customer insists that he has not purchased any medicine, it is an easy matter to look up the original prescription and describe the preparation to him. Nine times out of ten he will recall it at once and pay his bill without further question. This method, too, gives a convenient means of reference when the customer wishing a refill has forgotten his bottle with number attached.

*This should be *dilute* acetic acid, as Mr. Minton explains in his comments.

BOOK SALES.

Arthur Irwin Smith, Fulton, Ky.: Do you handle books as a side-line and find their sale slow? The following plan will be a business booster: Advertise that you will accept any book you have sold, plus ten cents, in return for any other book in your stock. This will attract many new customers who will readily see the endless-chain possibility of getting cheap reading matter. You will realize the usual profit on the first sale, and each extra ten cents will be "velvet." Of course, all books returned must be in first-class condition.

Try this plan, and you will find that it beats letting the stock lie idle.

LUBRICATING BARREL SPIGOTS.

Charles K. Stotlemeyer, Hancock, Md.: In order to prevent the spigots which are attached to syrup barrels, coca-cola kegs, etc., from becoming so tight that they cannot be turned, smear them with a little glycerin before putting them in; and every few weeks put in a little more glycerin around the turning part of the spigot. This will save many an annoying fifteen minutes in trying to turn a spigot that is cemented fast with crystallized sugar.

MARKING PRICES ON RUBBER GOODS.

Alex. F. Peterson, Missoula, Montana: For marking prices on cutlery, mirrors, rubber combs, etc., tincture of benzoin applied with a small camel's-hair pencil produces a surface that can be written on with ink of desired color. This plan obviates any possible risk of blurring or scratching, and the writing is much more legible than when done with bezoin itself in the ordinary way.

LETTERS

OH, YOU ADVERTISING MANAGERS!

To the Editors:

By the way, it just strikes me that I can give you a tip in your capacity as editor. It's all right—I expect no fee for it!

Remember my telling you that I am busy preparing for my anniversary? Well, in connection therewith I wrote to a number of manufacturing firms for free samples for distribution on this occasion. Now this is what I mean: roast the advertising managers of these manufacturers!

In answer to most of my letters I received a slip with a request to send in an order for goods running all the way from $10.00 to $50.00. Does it ever occur to these fellows that the man who has to ask them for samples must be a small man? The big fellows are selling advertised goods in large quantities and therefore get the samples thrown at them. Naturally, however, they feel that they don't need to bother with another man's samples. Besides, their trade is such that samples are hardly necessary. What is the consequence? In nearly all of the big stores you can find manufacturers' samples flying around all over —under the counters, down in the cellar, in the garret, and finally, when the porter gets a cleaning fit, he fires them out into the ash barrel!

Along comes the small druggist with the small clientele. His trade would appreciate such a thing as a free gift. If he is an advertising man he will make good use of samples, for with his trade a sample day would be looked upon as an inducement. It would be a day that would bring dollars into his till, but the advertising manager will tell him: no samples except with a $10.00 order!

Now where does the sense come in? Do the advertising men think the small fellow wants to employ these samples for his own use? Wouldn't it be a good deal more profitable to give the man who goes to the trouble to ask for them a limited number of samples, and thus be reasonably sure of their distribution, and judicious distribution at that, than to send them promiscuously to those who buy the quantities but actually have no use for samples? But that seems to be too much for the great advertising manager to understand.

Maybe if they see an editorial on such a question they will wake up, so I hope you will do your ugliest. *Sonst nichts.*

OTTO P. M. CANIS.

Ozone Park, Long Island, N. Y.

[NOTE BY THE EDITORS.—We have never conducted an expert inquiry into the sanity of the advertising managers of the country, and we do not know just how much they deserve this vigorous and indignant protest against their autocratic attitude. We suppose, though, that they adapt expenditures to receipts, and estimate that so many dollars in sales will justify so many dollars in samples. Otherwise they might spend more of their employers' money than they made for them, and thus find themselves out of a job. Their attitude, then, seems merely a scheme to hold their places. It would be heartless to turn a lot of advertising managers loose on the street looking for new positions.]

WANT TO JOIN THE "SOCIETY OF NON-WORKERS?"

Dear Billie and the rest of the "Boys":

I don't know that your name is Billie, but it sounds sort of friendly to use that word.

The main fault I find with all pharmaceutical publications is the great stress they put on *work*.

You must get down to the store before the other fellow does. You must keep open a little later at night.

You must hustle like the very devil while you are there to keep the other fellow off your heels.

You must dress your window twice as often. You must have twice as much light in your store. You must smile twice as much.

You must be a joiner—a member of the Cuspidor Club, secretary of the Golden Stars, Chaplain of the Bibbers, Chief Cook and Bottle Washer for the Capsule Clique, and so on.

Work, *work*, WORK, give 'em h—ll, set your clock to get up at four and then beat it by an hour or two! Don't shut up your store till morning. When you see a customer coming in, don't stop if you are bleeding at every artery. Jump for him as though he were the last rat you ever expected to eat.

Follow the Bible doctrine—be accommodating. If the customer asks for five stamps for a nickel, give him six, and if he wants a match, give him a box with your name embossed in gold on the lid.

Advertise, give away souvenirs, throw in

a house and lot with every tenth sale, put a twenty-dollar gold piece in the box every Sunday, and vote for the "Anti's" during the week.

Eat your dinner with one hand and put up medicine with the other. If you can just get one lap on the other fellow, it will soon be two, and then you will have him going.

Work, *work;* for God's sake, WORK! This is the everlasting cry! Work so you can get money to buy food to give you strength to work some more!

When you take a vacation, the whole idea is to get strength to give the other fellow a better run for his money when you get back.

The Song of the Shirt—did you ever read it? Have you felt the tragedy in every line? Poor Hood, facing inevitable death in the near future, felt the sarcasm, the irony, the bitterness of it all!

Would that a cyclone might come along and wipe off the face of the earth once more —grind every building and every pavement and vestige of civilization to impalpable powder and scatter it to the four winds! Let us be Hottentots once more! With one suit of God-given clothes, and the natural fruits of the earth, let us wander forth in the morning with no fear of approaching night!

Now, dear editor, please publish a lot of pieces about how to get *out* of work. Show us how two drug stores in a little town can run alternately—one the first day, and the other the next, so that each man can loaf with his soul for half the time.

Or, better still, have some corporation lawyer tell us how we can frame up a law to keep one drug store from being nearer than ten miles to another.

Let us quit talking about the "higher" requirements of our "profession" so long as a gray-headed man with the cares of a family on his mind has to march clear back to the prescription case to put up ten cents' worth of calomel in a beautifully decorated box.

Will some one write a piece about how to get out of work? How to enjoy the scenery around us—the woods and fields, the flowers and birds, the sky and sea?

Why must we work to get money to buy admission to some art gallery to see base imitations of what all out-of-doors offers us free of charge?

Why pay to see Romeo and Juliet parade before our vision, when we can stand on the street corner and watch the whole tragedy being enacted every day?

And I tell you, Billie, if I could tear loose from this drug store and ride up the Detroit river on an early September morn when the lifting fog, chased away by the rising sun, presents that beautiful imagery to the eye, I would be willing to give away a bottle of patent medicine with every mile!

What we need is a Society of Non-workers. I want to be the first charter member. Will you be the next? GEO. W. STAPLE.

Meridian, Miss.

HOW MUCH DID I MAKE LAST YEAR?

To the Editors:

At this season of the year all of us are thinking more or less about the financial result of the year's operations. I wonder how many retail druggists are really in a position to know this most important feature of their business?

I am reminded of a certain pharmacist who was in a state of great anxiety owing to the records that he had kept showing a profit of $3500 on his year's sales, whereas his assets showed a marked depreciation over the previous year, without his apparently having drawn from the business any of the profit mentioned. And well might this be the cause of anxiety, although it is very probable, in this particular case, that the discrepancy was due to inaccurate or incomplete records, and not to any actual loss of capital.

Proprietors of drug stores are not expert accountants. This cannot be expected, nor is it necessary. Every business man, however, should at least be conversant with the basic principles of a simple system of bookkeeping that will show at the end of stated periods the results of his business transactions. This knowledge is not nearly so difficult to absorb as many may think. Principles of bookkeeping are much more easily instilled into the minds of business men than other students, owing to the close relationship of such principles to common business practice, with which the former are thoroughly familiar.

My suggestion to the tradesman who has no adequate system of bookkeeping, and whose business does not warrant the employment of a bookkeeper, is that he seek the ser-

vices of a good, experienced accountant to install a simple and practical method of recording financial transactions. With some instruction from the accountant, and by the subsequent devotion of a little time each day, Mr. Businessman can easily keep his books written up, and when the end of the year comes he will have the satisfaction of knowing to a certainty where he is at. The amount paid for the accountant's services should not be large, whereas the benefits derived would undoubtedly warrant such an expenditure many times over.

Detroit, Mich. NORMAN H. F. MCLEOD.

MAKING MEN OF CLERKS.

To the Editors:

Just to-day I picked up a drug journal and on one page saw a picture of a poor druggist eating his dinner behind a prescription case surrounded by pills, extracts, lotions, etc. In the accompanying article, all the tortures that go with the pill business were outlined.

Let me say, however, that the conditions are just what the druggist himself makes them. I prefer eating dinner at home, with at least one hour to spend with my family. Good help is not so hard to find as that writer would have us believe. He seems to be unwilling, indeed, to trust his business to hired help. He must be on the job at all hours, or things will go to pieces. No one knows how to handle the trade but himself. And surely no one knows how to handle it worse than himself!

Why don't such a man get out in the fresh air, shake the moss off his back, soak up some of the sunshine, and replace that weary look with a smile? If he hires help, why doesn't he have more confidence in it, turn the store over to the clerks occasionally, ask their opinions, let them use their ideas in stock arranging and window dressing? Quite often they have good notions in their heads.

There's nothing that kills the good-will and ambition of a clerk quicker than a grouchy and suspicious boss.

I don't think the average clerk is guilty of one-tenth the neglect he is accused of. Show him what to do and what is expected of him. Be sociable and friendly to him, discuss your plans with him. Above all, give him your confidence, and you will get good service in return.

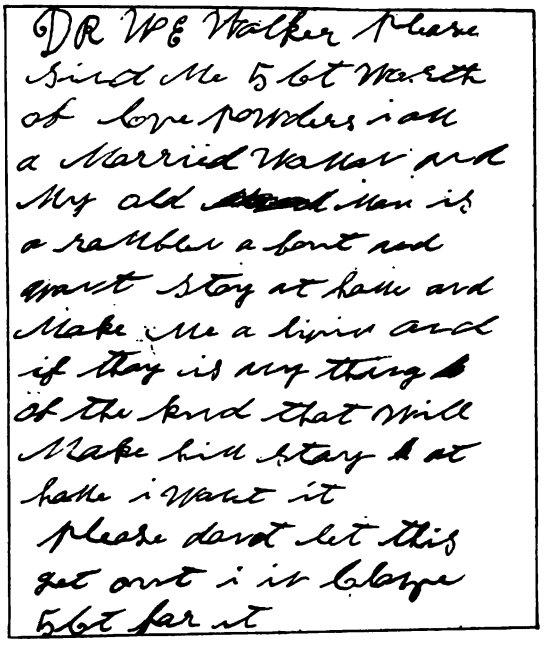
The druggist who is constantly looking for faults in his help, who keeps his business to himself and always has a grouch, certainly has a hard row ahead of him. If he were farming, his plow would not be scoured until the weeds had his crop.

Spalding, Nebraska. NICHOLAS FOX, Ph.C.

SHE WAS IN TROUBLE.

To the Editors:

Having been a subscriber to the BULLETIN OF PHARMACY for many years, I take the liberty of enclosing an amusing order for reproduction in your journal, if you see fit to use it. Apparently the lady had been having some trouble with a wandering husband! Is there any sovereign remedy for such difficulties? In


DR W E Walker Please
Send Me 5 bt March
of love powders i am
a Married Woman and
My old Man is
a rambler a bout and
wont Stay at home and
Make me a livin and
if they is any thing
of the kind that will
Make him Stay at
home i Want it
Please dont let this
get out i is Cloze
Kin for it

any event it may prove of interest to other readers, and in the meantime I would like to say that I think the BULLETIN OF PHARMACY is the greatest journal published! I would not be without it at any price. I look forward to its coming with almost as much interest as I do to pay-day.

J. DRAPER,
With the H. E. Walker Drug Co.
Corinth, Miss.

To the Editors:

To us the BULLETIN is our "Family Bible."

M. E. LUTHER.
Kalamazoo, Mich.

BUSINESS HINTS

Soliciting Telephone Orders.—

The telephone business is worth going after. Messrs. Wilkinson & Co. of Keokuk, Ia., distribute a four-page folder, used especially to cultivate buyers who order

The cover.

goods over the phone. The cover is seen in the accompanying etching. The inside pages read as follows:

TELL IT TO US ON THE TELEPHONE.

Tell us what you want—tell us whether you want it in a hurry or not.

Our telephone service is increasing in value every day because it saves so much time and is so helpful in taking care of many of the details that would otherwise annoy you.

Those of our customers who take advantage of our telephone service have expressed their surprise at the speed with which we take care of their orders.

Might not all this be true of you? Aren't there many occasions arise during the day in your home when we might be able to assist you and save you many unnecessary steps?

Perhaps you do not know that we deliver any article you might desire.

In addition to calling for, filling and delivering prescriptions, we will deliver any other drug-store goods that you may care for. It makes no difference whether the sale is a five-dollar or a twenty-five-cent one, we will take care of you in a satisfactory manner.

Call us on the phone. Let us demonstrate the worth of our telephone service. Number 68, either phone.

WILKINSON & CO.,
J. Fred Kiedaisch, Manager.
Keokuk's Biggest, Busiest and Best Drug Store,
422 MAIN ST., KEOKUK, IOWA.

The paper is of a light lavender color, the ink being a dark purple—a very good color combination.

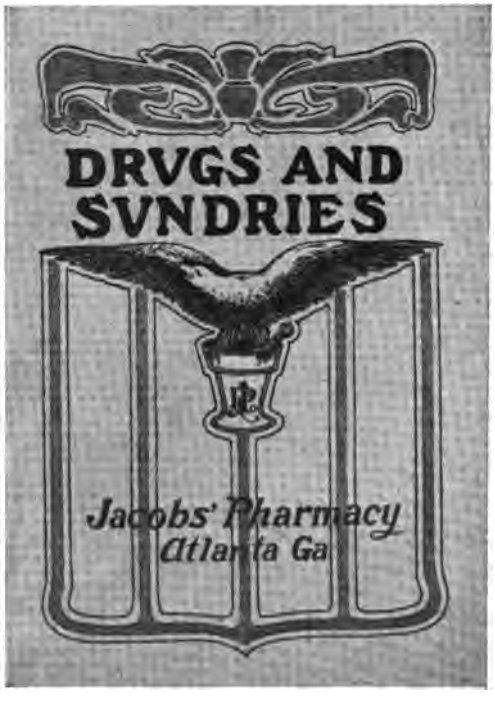
A Pretty Easter Window.—

Jewell A. Still, manager of Dedman's Drug Store, Arkansas City, Arkansas, has found the display illustrated in the accompanying engraving a good Easter window. The articles exhibited consisted in the main of perfumes. Holly leaves and crêpe paper were used

by way of ornament, while several window signs bore on the nature of the goods in the trim. Aside from perfumes there were soaps, toilet waters, and a few tooth preparations. In the rear, somewhat elevated, were seen several pieces of cut glass. The display caused no little comment.

A Retail Druggist's Catalogue.—

The Jacobs' Pharmacy Co., of Atlanta, Ga., is the well-known retail drug house established by Joseph Jacobs. The company now owns and conducts a chain



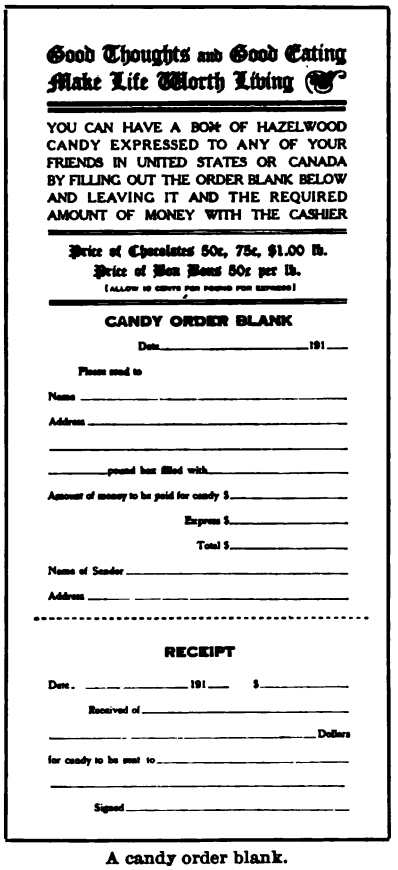
The mail-order catalogue of Jacobs' Pharmacy Co. of Atlanta.

of ten or twelve stores, having recently taken over the three pharmacies of T. H. Brannen. Among other things, quite a large mail-order business is done—so much so as to justify the publication of an illustrated catalogue containing no fewer than 144 pages. Here are listed proprietary medicines, toilet articles, brushes, combs, stationery, leather goods and salable material of a thousand and one kinds. The illustrations are mostly devoted to the line of specialties bearing the label of the Jacobs Pharmacy Co. From the preface of the book we find that 5 per cent rebate checks are given with every purchase made in person or by mail. These checks are accepted in payment for any of the Jacobs laboratory products or for anything in the art and gift department.

A second and much smaller catalogue is gotten out for the illustration and description of rubber goods and sick-room supplies. This is of such size that it can be slipped into an ordinary envelope or enclosed in packages leaving the counter. It contains 36 pages and cover.

A Candy Order Blank.—

Often a customer comes into the store, buys a box of candy, and asks the druggist to send it out of town. Here is a blank that will be found very



Good Thoughts and Good Eating Make Life Worth Living

YOU CAN HAVE A BOX OF HAZELWOOD CANDY EXPRESSED TO ANY OF YOUR FRIENDS IN UNITED STATES OR CANADA BY FILLING OUT THE ORDER BLANK BELOW AND LEAVING IT AND THE REQUIRED AMOUNT OF MONEY WITH THE CASHIER

Price of Chocolates 50c, 75c, $1.00 lb.
Price of Bon Bons 50c per lb.
[ALLOW 10 CENTS PER POUND FOR EXPRESS]

CANDY ORDER BLANK

Date _____ 191__

Please send to

Name _____

Address _____

_____ pound box filled with _____

Amount of money to be paid for candy $ _____

Express $ _____

Total $ _____

Name of Sender _____

Address _____

RECEIPT

Date. _____ 191__ $ _____

Received of _____

_____ Dollars

for candy to be sent to _____

_____

Signed _____

A candy order blank.

useful in handling such orders. It may be attached to the soda menus by way of advertising. Such a blank should encourage customers of a store to send candy to their out-of-town friends. This specimen was sent to us by Joseph Hart, chief prescriptionist of Powers & Estes, Portland, Oregon.

A Bodemannian Announcement.—

Everybody knows who Wilhelm Bodemann is. He needs no introduction to any audience—least of all to a BULLETIN audience. This is enough, then, by way of explanation. For the rest we leave the accompanying

Of Interest to Hyde Parkers

When you retain an attorney for an important case—you select the best. When you buy a piece of real estate—you go to the most painstaking abstract firm, one you have confidence in. When you or one of your family are seriously ill—no one but the most skilful physician is called in.

Do you use the same care in selecting the careful, competent, reliable Druggist for your Prescriptions and your Household Remedies?

To the newcomer in this section it may be welcome news to know that on

Lake Avenue and 50th Street

is such a Pharmacy.

W. Bodemann has been engaged in Pharmacy in Chicago since 1867. Has in this span of years been called into service where pharmacy was concerned by the National, State, and City government. Lived in Hyde Park in his own home since 1880. Never "*substituted*," never allowed Bar Practice, and conducts a Pharmacy without the disturbing Soda Fountain nuisance.

If you are in doubt where to buy your medicines, ask the older residents or any physician in this city—who know that we don't substitute—inferior for genuine—Drugs. You always get what you pay for.

Julius H. Schroeder, who has been with me since 1884, is on hand when I am not, and—who doesn't know Julius?

Phone your orders. We call for and deliver prescriptions promptly.

W. Bodemann,
The Hyde Park Pioneer Druggist.

Telephone Oakland 561.

announcement to tell its own story. Wilhelm got this out recently in his constant search for more business. We venture to say that the Hyde Parkers flocked to the Bodemann pharmacy in droves after getting the circular and reading it.

By-products.—

Naphtha acid is an ill-smelling by-product obtained in the manufacture of kerosene and lubricating oils. It has been used to a small extent in cheap soaps, but its disagreeable odor has caused most of it to be thrown away. Recently a method has been found of eliminating this odor, and the "acid," which has strong detergent properties, is now an important substance for soap-making.

PRACTICAL PHARMACY

New Formulas for the N. F.—

Here are some of the proposed formulas for the forthcoming edition of the National Formulary:

LIQUOR PICIS CARBONIS.

(Liquor Carbonis Detergens. Coal Tar Solution.)

Coal tar .....200 Gm.
Quillaja in No. 20 powder.....100 Gm.
Alcohol, a sufficient quantity to make..1000 Cc.

Mix the coal tar and quillaja with 700 Cc. of alcohol and macerate during seven days in a closed vessel with occasional agitation. Then filter and wash the contents of the filter with a sufficient quantity of alcohol to make the product measure 1000 Cc.

SYRUPUS AMMONII HYPOPHOSPHITIS.

(Syrup of Ammonium Hypophosphite.)

Ammonium hypophosphite.....35.5 Gm.
Diluted hypophosphorous acid.....2 Cc.
Distilled water .....100 Cc.
Glycerin .....100 Cc.
Compound spirit of vanillin.....2 Cc.
Syrup, a sufficient quantity to make..1000 Cc.

Dissolve the ammonium hypophosphite in the distilled water, add the diluted hypophosphorous acid, filter, and then add the glycerin, compound spirit of vanillin, and sufficient syrup to make the product measure 1000 Cc.

TINCTURA DELPHINII.

(Tincture of Larkspur.)

Larkspur seed, in No. 30 powder.....100 Gm.
Alcohol, a sufficient quantity to make..1000 Cc.

Moisten the powdered larkspur seed with a sufficient quantity of the alcohol and pack it firmly in a cylindrical percolator and pour on enough alcohol to saturate the drug and leave a stratum of liquid above it. When the liquid begins to drop from the percolator, close the lower orifice, cover the percolator, and macerate for six hours. Then allow the percolation to proceed slowly until 1000 Cc. of tincture is obtained. Rarely used internally, but is commonly employed externally to destroy parasites.

OLEUM RICINI AROMATICUM.

(Aromatic Castor Oil.)

Saccharin .....0.5 Gm.
Oil of cinnamon.....1.5 Gm.
Vanillin .....1 Gm.
Cumarin .....0.1 Gm.
Alcohol .....40 Cc.
Castor oil, a sufficient quantity to make.1000 Cc.

Dissolve the oil of cinnamon, saccharin, vanillin, and cumarin in the alcohol and all the castor oil and mix thoroughly.

A Liquid Shampoo Soap.—

P. Henry Utech told the members of the Pennsylvania Pharmaceutical Association convened at Bedford that he has found a "Liquid Aromatic Shampoo Soap" a good seller.

"The formula," said Mr. Utech, "is one suggested by Wilbert some years ago, with but a slight modification. Numerous experiments were carried out with the ordinary fixed oils, such as linseed, sesame, Malaga olive oil, and mixtures of these with cottonseed oil, but all were found to be objectionable for some reason or other.

"The formula now used is as follows:

Sodium hydroxide.....80 grammes.
Potassium hydroxide.....80 grammes.
Cottonseed oil .....1000 Cc.
Alcohol .....500 Cc.
Water, sufficient to make.....2500 Cc.

Dissolve the hydroxides in 500 Cc. water. After solution has been effected, add the alcohol, and finally the cottonseed oil, in several portions, and shake thoroughly. Allow to stand for several hours, shaking the mixture occasionally, until thoroughly saponified. Finally add water sufficient to make 2500 Cc.

To the soap liquid thus prepared add:

Potassium carbonate.....50 grammes.
Terpineol .....12 Cc.
Evergreen "A" sufficient to produce a grass green color.

"This soap can be made at a cost of about 75 cents per gallon. Dispense in four-ounce bottles at 25 cents. The trade packages of similar products seldom contain more and retail at 50 cents, a good talking point. By putting a little personal push back of this product, it can be made into a very profitable specialty."

Incompatibility Between Internal and External Applications.—

"Quite a little attention," says the *Practical Druggist*, "is directed by the medical press at present to the recently proved fact that there is sometimes an epidermal manifestation caused by the incompatibility existing between a medicine given internally and one applied externally. Reference is made to a case in which hydrogen peroxide was applied externally while potassium iodide was given internally. The result was a severe burning in the skin, the cause of which was not at once discernible. In another instance a colorless tincture of iodine taken internally while an ointment of ammoniated mercury was applied externally, caused severe skin irritation attributed to the toxic action of mercuric iodide. Again, sulphur internally and a solution of mercury used externally may be expected to cause a deposit of black mercuric sulphide in the skin.

"These and numerous other instances should be sufficient to impress both physician and pharmacist with the importance of avoiding such incompatibilities."

Cleaning Plate Glass.—

At the last meeting of the Pennsylvania Pharmaceutical Association Charles S. Herron treated briefly the subject of cleaning plate glass. He said:

"Most pharmacists, who are located in regions where the illuminating medium is natural or artificial gas, have experienced considerable difficulty with a peculiar greasy deposit on plate-glass windows, mirrors, etc., which gives to them a bluish appearance regardless of the amount of energy expended in the cleaning.

"If after having followed the ordinary procedure of cleaning a piece of glass, a small sack be made of coarse cheese-cloth and filled with lampblack and the glass thoroughly polished with this, and then polished with a clean cloth, it will assume a brilliancy unobtainable by any other means."

Aromatic Elixir.—

Thos. A. Egan suggested a new method of making aromatic elixir at the last annual meeting of the Pennsylvania Pharmaceutical Association.

"This elixir," said Mr. Egan, "may be made according to the U. S. P. But with the following exceptions a more elegant aroma can be obtained: Take of the oils the required amount to make compound spirit of orange, U. S. P., and dissolve them in the alcohol. Put this solution in a refrigerator (the fountain may be used) and allow the solution to remain forty-eight hours. I find the oils blend with a more fragrant aroma than when strictly following the U. S. P.

"Remove the solution from the refrigerator and let it stand at the temperature of the room for twelve hours. Now follow the directions as given in the U. S. P.

"The preparation when made this way retains the same aroma for a longer time than when made by any other process I have ever tried."

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Nuggets of News.—

During convalescence from typhoid fever there is considerable loss of muscle tissue.

Barley and malt contain no less than eight different enzymes, including rennin and tyrosinase.

Light reduces mercuric chloride solutions when weak. They should be dispensed in amber bottles to prevent this.

The oldest perfume recorded is Ladanum, a resinous exudation of the purple rock-rose of Crete.

Alcohol has been produced from waste paper-pulp at a cost of 10 cents per gallon.

A chemically active nitrogen is produced by electric sparks which combines with other substances much more readily than ordinary nitrogen.

Typhoid fever is much more prevalent in the United States than in Europe, due to more careful water-treatments in the latter country.

It is estimated that the number of electrons in an atom is eight times the atomic weight.

A thunderbolt is supposed to consist of O_3 formed by the electric discharge from the clouds.

It is estimated that the water-power of the United States amounts to fourteen and a half millions of horse-power.

German chemists have demonstrated that iridin and euonymin have no effect on the secretion or composition of bile.

Morphine reduces the digestive power of the stomach and also delays digestion.

Rattlesnake poison is thought to be a body of phenolic character. It is free from nitrogen and forms only a very small part of the liquid venom.

A volcano in the Philippines emits a lava which makes glass by the simple addition of lime. A factory has recently been started for making glass articles.

Ours are Brass and Wood.—

The high and increasing price of platinum has caused a search for substitutes therefor in standard weights and measures. Tantalum has been found a satisfactory substitute for weights, and silica for measures. The marked ends of the silica are coated with a thin layer of platinum, on which the terminal marks are made.

The Enduring Sour!—

Glycerophosphates are not easily changed to phosphates and glycerin, particularly in the presence of acids. A high temperature (100° C.) favors the change, and a very slight acidity also, but with a marked acidity and a low temperature the glycerophosphates are quite stable.

Dott Says—

Strychnine hypophosphite is one of the most soluble of strychnine salts. It dissolves in about 3.3 parts of water at ordinary temperature. It crystallizes with three molecules of water. Dott's so!

It Forms the Habit.—

In the rusting of iron, not only is the iron chemically changed, but all the impurities in the iron are also changed. Sulphur and phosphorus are oxidized to acids, carbon to carbon dioxide, in part, and to graphite in part, etc. Hence when rusting commences the acid products formed promote its extension.

Artificial Sponges.—

A new kind of artificial sponge, which swells and softens in water like the natural animal, is made by treating cellulose with zinc chloride until a pasty mass is formed, then mixing this with salt, pressed in a spiked mold, and removing the salts by washing.

Ureal Combination.—

Hydrogen peroxide combines with urea, yielding a powder which is soluble in alcohol and in water. On heating the solution to 60° C. it is decomposed, and oxygen is liberated. The compound is now in the market under the name of "Hyperol."

The Boy's Appetite.—

A Philippine chemist says that a growing animal which receives only sufficient food to keep up its body weight or a little more, is in a condition of severe starvation, because the skeleton grows at the expense of the rest of the body.

Better Left Unsaid.—

Indole, which is one of the chief odorous principles of feces, has been found in orange and lemon blossoms and in one species of coffee flowers. Skatol, another intense and unpleasant fecal odor, has been found in nectandra flowers.

Infusion of Digitalis.—

Focke says that a one-per-cent infusion of digitalis leaves represents 80 per cent of the activity of the leaves, and a 10-per-cent infusion extracts 74 per cent of the activity. He recommends the latter for medicinal use—complete extraction making too dilute a preparation.

To Boom the Soda Fountain.—

Soda water is slightly antiseptic and will reduce the number of living germs in it on standing, but it does not become sterile. Typhoid germs are more sensitive than most others, but even these survive in part.

The Colloid Dictionary.—

Barry defines a colloidal solution as a liquid holding in suspension sponge-like solid-liquid particles, the attraction between solid and liquid being balanced against the elasticity of the solid and the surface tension.

This Applies to Water Only.—

A number of investigators unite in advocating copious water-drinking during meals. They find that it stimulates gastric secretion and lessens intestinal putrefaction. Digestion is better for it.

Artificial Boards.—

Sawdust is mixed with a paste of magnesia, magnesium chloride, and water, and pressed into boards. When the magnesium cement has set, semiartificial board is obtained which makes a superior flooring.

BOOKS

A New Edition of "Pharmaceutical Formulas."

Often our readers ask the name of some standard book on pharmaceutical recipes. We therefore embrace this opportunity of reviewing an excellent work of that character, Pharmaceutical Formulas, published by the *Chemist and Druggist* of London.

This book, now in its eighth edition, is full of up-to-date information on the composition of pharmaceutical and toilet preparations. The text has been carefully revised. There are 450 alterations and annotations, while new formulas to the number of 400 or more have been added. The chapter on toilet preparations is itself worth the price of the book. Many pages are also devoted to insect and other pests that infest plants. This chapter has been rewritten, the purpose being to give pharmacists material help in cultivating business in remedies that are used to destroy parasites on plants. Another new feature is a monograph on modern skin creams with abundant formulas. The section on perfume treats of the composition, properties and blending of synthetic perfumes, which should be of service to those who like to experiment with new odors.

Many other notes of interest have been added bearing on the subjects of cosmetics, beverages, culinary recipes, miscellaneous household requisites, varnishes, polishes, and pharmaceutical preparations. The price of Pharmaceutical Formulas is $3.50. McKesson & Robbins, of New York, are the American agents.

Information on Medicinal Leaves and Herbs.

The Bureau of Plant Industry of the Department of Agriculture has issued Bulletin No. 219 on the subject of "American Medicinal Leaves and Herbs." The author of the Bulletin is Miss Alice Henkel, who has, it will be remembered, previously prepared two or three other bulletins of the same general character. One of them treated of American root drugs, and another of medicinal barks. Leaves and herbs are considered in the present instance, and, as before, the Bulletin discusses such practical details as the parts of the plants employed, the places where the plants may be found, the purposes for which they are used in medicine, and the prices paid for them. The brochure contains descriptions and illustrations of 36 of the most important plants yielding medicinal leaves and herbs, 15 of which are official in the U. S. P. The illustrations are chiefly from photographs taken from nature by C. L. Lochman. Any one of these three Bulletins may doubtless be had by simply dropping a request to the Secretary of Agriculture, Washington, D. C.

Physicians' Visiting or Call Lists.

We have received copies of two of the popular physicians' visiting or call lists, gotten out for use during 1912. One is "The Physician's Visiting List" published by P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, and the other is "The Physician's Perfect Call List and Record," published by E. G. Swift, Detroit, Mich. Both of these books have long been popular, and are particularly well suited to those druggists who are looking for something to present their physician friends with at the holiday season.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the Bulletin *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Deodorizing and Coloring Benzine.

H. E. L. asks: "How do you deodorize benzine? What substance will color gasoline, say, red, green, or blue?"

Prof. W. L. Scoville, writing in the Bulletin some time ago, said that fibrous or spongy aluminum hydroxide was recommended for purifying benzine, gasoline, etc. The benzine is shaken from four to six hours with the fibrous hydroxide and then filtered. The hydroxide removes the acids in addition to deodorizing the benzine.

Benzine, as well as other petroleum distillates, may be purified by the process of the U. S. P., which is given in Part I of the book. The following is another process: Add to the benzine 1 or 2 per cent of oleic acid, which dissolves, and then ¼ per cent of aqueous solution of tannin, which is incorporated by thorough agitation. A quantity of solution of caustic potash or milk of lime sufficient to combine with the acids is then well shaken with the mixture and the whole allowed to stand. The benzine rises to the top of the aqueous liquid, sufficiently deodorized for all practical purposes.

The following process has been patented in Germany for disguising the odor of benzine and other petroleum distillates: Add to the liquid a volatile oil containing a terpene such as oil of turpentine, fennel, caraway, lavender, pine needles, eucalyptus, etc., and then an alkali. If the benzine be mixed with 1 per cent of oil of fennel, warmed to 70° C., then agitated with 2½ per cent of solution of soda, specific gravity about 1.30, and allowed to stand till the benzine separates from the aqueous liquid, the former will have merely an odor of fennel.

To color gasoline, use an oil-soluble dye. It can be obtained from Theodore Eaton & Son of Detroit or any dye house. Alkanet root has also been recommended for the purpose.

Elixir Lactated Pepsin, 80 Grains.

J. F. R. writes: "I want some information about elixir lactated pepsin, 80 grains. Suppose a prescription specifies 80 grains of lactated pepsin to the fluidounce of

elixir. Such a formula will call for far less pepsin itself than 80 grains, as several other ingredients beside pepsin enter into the composition of lactated pepsin. The apparent discrepancy I think has been explained by you before, but I have forgotten it. How is it that so much lactated pepsin appears to be present?"

Lactated pepsin is a compound of several ingredients. For use in an elixir it may be made after the formula of compound powder of pepsin N. F., in which the milk-sugar has been omitted. Having made this compound powder, leaving out the milk-sugar, take from it the equivalent of 80 grains of the complete formula, and dissolve that equivalent quantity, in proper proportions, in a red aromatic elixir. Use the elixir base suggested in compound digestive elixir N. F. Having made both the lactated pepsin without the milk-sugar and the vehicle, one can prepare elixir of lactated pepsin of any strength.

Dehydrating Alcohol.

A querist asks: "Can alcohol be dehydrated by copper sulphate? If so, what is the chemical reaction?"

Anhydrous copper sulphate is used to detect water in alcohol. Exposed to moisture it turns blue. But there is no chemical reaction. The salt merely takes up water of crystallization. While copper sulphate is thus used in a test, it would not be wise to conclude that alcohol can be dehydrated in this way. That method would not be practical. Better let the alcohol remain in contact with lime over night and then distil carefully. The distillate will contain less than one per cent of moisture. Copper sulphate would not prove any more efficient. In fact, while more expensive it would hardly be as effective. No chemical short of metallic sodium would remove all the water.

In Squibb's Materia Medica we read of absolute alcohol containing only 0.2 per cent of water, although the Pharmacopœia admits a limit of one per cent. In its preparation, the purest grade of alcohol is slowly percolated through dehydrated lime and rectified by redistillation, giving a product which runs about 99.8 per cent strength. It contains no empyreumatic impurities and complies with all official tests.

Galenical Preparations of Creosote.

H. W. M. has been having trouble with a creosote compound. He writes: "Several of our physicians are prescribing a cough syrup of:

Morson creosote	16 drops.
Alcohol	1½ fluidrachms.
Water and syrup, enough of each to make	2 fluidounces.

"I dispense this mixture by the quart. I have tried every conceivable way to make a clear solution without success. I have tried rubbing it with magnesium carbonate, filtering with sodium phosphate, filter-paper, pulp, albumen, and talc, but the filtrate is turbid. It is clear at first, but turns cloudy again. Can you suggest a way of keeping it clear?"

We are not familiar with Morsón creosote. But creosote and its synthetics resist solution in water. To make a galenical preparation calls for an excessive amount of alcohol. But one can dispense an emulsion. In fact the emulsion offers the only means of presenting creosote or its synthetics in therapeutic quantities in a permanent fluid. The clear preparations are not apt to

SOME COMING PHARMACISTS.—This interesting group of young men represents the junior class of the School of Pharmacy of the University of Illinois. The picture was taken in Grant Park near the school. General Logan, the figure in imperishable bronze back of and above the class, is spurring the boys on to a life of energetic determination and ultimate victory. Professor W. B. Day may be seen at the rear of the picture—the fourth standing figure from the left.

contain more than very small amounts of creosote. For further information along this line consult the annual index of the December BULLETIN, 1911, for creosote elixir and emulsion.

Almond Lotion and Cream.

L. E. S.—We do not know the composition of the proprietary mixture which you mention. The following formulas of almond toilet preparations have been suggested:

ALMOND LOTION.

Blanched almonds	4 ounces.
Curd soap	½ ounce.
Oil of bitter almonds	10 minims.
Oil of bergamot	1 drachm.
Rectified spirit	4 ounces.
Orange-flower water	12 ounces.

Dissolve the soap in the water by warming, and add it gradually to the almonds beaten up in a mortar. Strain, and add the oils dissolved in the spirit. Mix well.

ALMOND COSMETIC CREAM.

Blanched almonds	1 ounce.
Rose-water	4 ounces.

Beat the almonds to a paste and add the rose-water; strain, heat to boiling point, and add:

White wax	1 ounce.
Almond oil	2 ounces.
White Castile soap	1 ounce.

Mix thoroughly and add:

Saturated boric-acid solution	2 ounces.
Eau de Cologne	1 ounce.
Oil of bitter almonds	4 minims.
Oil of rose-geranium	5 minims.
Glycerin	1 ounce.

Removing Scorch Stains.

A. J. J. submits the following query: "Do you know of any liquid which will eradicate burnt spots from clothes caused by tailors while ironing? I have tried hydrogen peroxide, acetone, ammonium hydroxide, and acids with unsatisfactory results. Still there is a liquid that does the work and resembles the first two substances in taste, odor, and appearance."

Scorch stains are sometimes removed as follows: "From silk goods with potassium permanganate followed by sulphurous acid, or hydrogen peroxide; from woolen goods, by hydrogen peroxide; from cotton and linen goods, by hydrogen peroxide or sodium hypochlorite." The foregoing we have quoted literally from the books, but it would seem apparent that *solutions* of these chemicals are intended.

Suppose you try on a restricted portion of the cloth, in an experimental way first, a dilute solution of chlorinated soda. That ought to be effective. Having removed the stain, wash with water. Of course care must be exercised lest the dye in the fabric be removed.

Sour Milk at High Altitudes.

L. L. submits an interesting query. He writes: "Will you please publish a formula for making sour milk? A lady customer living at an altitude of 6000 feet claims that she cannot sour milk in the ordinary way in her home."

Of course all forms of life diminish as we go higher. At the elevated spot where the querist lives, there may be an absence of sour milk bacilli. But the germs may be bought in tablet form from certain pharmaceutical houses. Planted in milk free from preservative, and allowed to stand in the room over night, they produce lactic acid, yielding fresh, pure buttermilk. The subject is too big to discuss further here, but houses like Parke, Davis & Co. will be glad to send literature and samples for trial.

Clarifying Lime Juice.

I. X. L. complains that West India lime juice is shipped in large hogsheads very dark and unfiltered. He wants a process for clarifying the liquid.

This may be clarified by heating it either alone or mixed with a small quantity of egg-albumen, in a suitable vessel, without stirring, to near the boiling point of water, until the impurities have coagulated and either risen to the top or sunk to the bottom. It is then filtered into clean bottles, which should be completely filled and closed with pointed corks, so that each cork has to displace a portion of the liquid to be inserted. The bottles are sealed and kept at an even temperature, preferably in a cellar. In this way the juice may be satisfactorily preserved.

Making Ten-per-cent Sulphuric Acid.

S. M. M. writes: "Given 92.5-per-cent sulphuric acid, how can a pint of ten-per-cent acid be made?

It can be made as follows:

1 pt. = 473.2 Cc.
Sp. gr. 92.5% sulphuric acid 1.826 (U. S. P.).
Sp. gr. 10% sulphuric acid 1.067 (U. S. P.).
473.2 Cc. 10% sulphuric acid at a sp. gr. of 1.067=504.7 grammes
=50.47 grammes absolute sulphuric acid.
50.47 divided by .925 = 54.56 grammes, 92.5% sulphuric acid.
54.56 divided by 1.826 = 29.88 Cc. 92.5% sulphuric acid.

By reference to the table of weights and measures in the U. S. P., we find that 29.57 Cc. = 1 fluidounce, and the difference between this and 29.88 Cc., which is 0.31 Cc., can be calculated from this table as approximately 5 minims. Therefore, 1 fluidounce, 5 minims, is the required answer.

For all practical purposes 1 fluidounce of sulphuric acid can be diluted to make 1 pint of 10-per-cent acid, the exact percentage by this dilution being 9.9 per cent.

An Ink Eradicator.

J. E. M. wants a good process for removing ink stains from clothing. We have published several formulas of this character, but the following method is probably the most practical:

If the clothing is white use sodium hypochlorite solution with acetic acid. If the clothing is colored use a solution of oxalic or citric acid. Sodium hypochlorite, being a bleaching agent, is apt to remove the dye in the fabric as well as the ink.

Consult previous issues of the BULLETIN for other processes.

Softening Celluloid.

A. S. wants to know how to bend celluloid so that it will stay bent.

If celluloid is warmed in a bath in boiling water it

will be possible to bend it. That statement is made in "Henley's Book of Formulas," but it would be advisable to write some manufacturer of celluloid collars or celluloid novelties for further information. We do not know what process is used in the factories to bend celluloid. It may be wise to add that when celluloid is exposed to a flame, it undergoes a very active combustion.

Saturated Solution of Potassium Nitrate.

G. H. D. asks: "How would you fill a prescription for 8 ounces of saturated solution of potassium nitrate?"

Take 1 ounce of the salt, dissolve it in 3.6 ounces, by weight, of water, for the Pharmacopœia says potassium nitrate is soluble in 3.6 parts of water. Measure the resulting volume and calculate how much more of this salt solution is necessary to make 8 fluidounces.

An Herb Tablet.

R. E. S.—We do not know the composition of the proprietary preparations which you mention, but an herb tablet may be made after the following formula:

Powdered aloes	½ grain.
Powdered podophyllum	¼ grain.
Powdered rhubarb	¼ grain.
Powdered senna	¼ grain.
Powdered gentian	½ grain.
Powdered nux vomica	⅛ grain.
Powdered lappa	⅛ grain.
Powdered taraxacum	⅛ grain.
Powdered berberis aquifolium	⅛ grain.
Powdered licorice root	¼ grain.
Powdered xanthoxylum bark	⅛ grain.
Powdered buchu leaves	⅛ grain.

Fluidextract of Black Haw Not Aqueous.

R. L. C. asks: "Please tell me how I can mix fluidextract of black hair with water. What proportions are used?"

We presume you mean black haw. We know of no such drug as black hair. We do not consider it possible to mix fluidextract of black haw with water and obtain a clear solution, for the drug is made with an alcohol menstruum. Of course the mixture may be filtered clear, but we doubt whether the filtrate would be of much therapeutic value.

Unna's Ointment.

A. B. P. wants the formula of Unna's ointment.

Unna was responsible for so many formulas that we hesitate to say which one definitely answers to the name specified. Unna's Sulphurated Zinc Paste, N. F., has an ointment base, but we cannot with any degree of certainty say just what preparation is called Unna's ointment.

R. M. S.—The composition of phosphorous rat paste was discussed at some length in this department of the November BULLETIN, 1910, on page 480. Suppose you consult that issue. We hesitate to take the subject up again so soon afterwards.

GENERAL ESSAYS

ESSAYS IN BRIEF.

"No man is a hero to his valet." Why? Partly because, in the intimacy of this relation, the hero, who is after all only a man, discloses many traits that are very commonplace and far from heroic, but more particularly because the valet *is* a valet with only a valet's comprehension. You cannot expect him to see elements of greatness which are utterly beyond his grasp.

Do every piece of work the best you know how—strive always to do a given thing better than anybody else can do it. Never mind if you aren't getting sufficiently paid for it. If there is anything that gives me an attack of mental colic it is the man—and the woods are full of him—who is always crying out that he isn't paid what he is worth and that he isn't going to kill himself until his employer does the square thing.

A man should always do his level best, not merely because it pays in dollars and cents, not merely because it will increase his salary and in time get him a better place, but because—and this is far more important in the long run—*it develops power and ability in the man himself.* Capacity grows by what it feeds upon. Men grow strong by using their strength. Nothing develops power but the constant exercise of it.

In this democratic country of America men get just what is coming to them—sooner or later. The reason why most of them don't get more is because they aren't worth it—they are in the way—they are barnacles on the ship. Let a man make good and he will land on his feet every time—he needn't worry about that. The country is looking for him—waiting for him to appear. Employers are up in the conning tower scanning the horizon with telescopes, and good men are snapped up so quick it makes them dizzy. H. B. M.

FOOT-RULES FOR MEASURING CHARACTER.

In New England: "What do you know?"
In New York: "How much y' got?"
In the South: "Who are you?"
In the West: "What can you do?"—*Life.*

Not one of these foot-rules will take the measure of a man, though the last one would come the nearest to it. Here is a yardstick that would do more accurate work than all of them:

"What are you?"

Are you a "decent" man? Do you act the square deal in every relation in life? Have you the manners of good breeding? Can you qualify for the best positions in the community? Have you got the brains and the ability and the character?

Yes? Then it doesn't matter in the least what university, if any, you were graduated from, whether you know your Browning or not, how large your pile is, who your great-grandfather was on your mother's side, or how many flabby and impecunious dukes are after your youngest daughter.

You yourself—that's what counts. *What* are you?

H. B. M.

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THE MONTH'S HISTORY

THE RICHARDSON BILL.

The Richardson bill to amend the food and drugs act has caused a lot of discussion lately in the drug trade. It will be recalled that the Supreme Court of the United States held last year that the present act could not be made to apply to false and misleading statements regarding the therapeutic claims made for medicinal preparations. Since then there has been a wide-spread desire to so amend the law as to correct this omission and shortcoming.

The Richardson bill is one of several measures which seek to remedy the situation. It seems, however, to go farther than some individuals and interests in the trade think it ought to go. Primarily, of course, it brings remedial claims within the scope of the food and drugs act, and it does this whether the claims are made on the label or even in advertisements, posters or circulars. It also seems to restrict to registered pharmacists and physicians the manufacture of all medicaments—which would apparently give the two professions a monoply over the patent medicine business. Then, too, it greatly increases the number of drugs, the content of which must be mentioned on the label, and it provides that not only must the presence of these be indicated, but the names must also be given of the parent substances from which they are derived.

As we have intimated, there seems to be a wide difference of opinion over the merits and desirability of this bill. Some of the editorials we have seen in the pharmaceutical press, however, have manifestly been based on a misreading of the measure. From a grammatical and rhetorical standpoint, it is very loosely and poorly drawn, and one can scarcely be blamed for failing to know what it all means. We aren't perfectly sure we are right ourselves!

* * *

THE ANTI-NARCOTIC DECISION.

A good deal of discussion has resulted, too, from the contemplated ruling or decision of the Board of Food and Drug Inspection regarding the importation and sale of opium, morphine and cocaine. This was issued tentatively some weeks ago, and it is generally understood that it will become official, though perhaps with modifications, after the interests involved have had an opportunity to express their opinions and perhaps utter their protests. In a word, the decision would, if officially adopted and subsequently upheld by the courts, practically be tantamount to an interstate anti-narcotic law. In effect it would do pretty much all it was sought to accomplish by means of the Foster bill at the last session of Congress.

It provides that all dealers must keep careful records of their sales of the proscribed narcotics except when dispensed on the prescriptions of authorized medical, dental and

veterinary practitioners. It limits the sale of narcotics absolutely to medicinal purposes. It declares that every package containing any of the specified drugs shall bear a red label containing the word "Poison" and the skull-and-crossbones device. The revenue feature of the Foster bill is of course absent, since this could not be incorporated in a mere decision or ruling of a governmental bureau or department.

Offhand this document would seem to do little more than take one of our numerous State anti-narcotic laws and make it national or interstate in character. It does go a step farther, however, in compelling the keeping of records of all sales. On the other hand, though, it is not as rigid as some of the State laws in that it does not absolutely restrict the sale of narcotics to physicians' prescriptions. Certain it is that we need something in the way of an interstate narcotic law, and until we get it the State acts are very seriously nullified. Whether this decision will provide a remedy, whether the Foster bill is what we want, or whether something quite different from either is indicated, remains to be worked out. For ourselves, we look upon the keeping of records as an intolerable nuisance, especially to the large manufacturers and jobbers, and we do not see any compensating advantage.

* * *

TO AMEND THE SHERMAN ACT.

While speaking of national legislation and contemplated national legislation we are reminded that Frank H. Freericks, who in the illness of Judge Errant is doing legal work for the N. A. R. D., has drawn up an amendment to the Sherman anti-trust law. This strikes us as being exceedingly sensible. We went on record editorially a month or two ago as believing that under the present Sherman act any price protection plan which the N. A. R. D. might devise, no matter how clever or ingenious, would in all probability be declared invalid by the courts. The only sure remedy is to amend the law itself.

We are not able at this writing to give the provisions of Mr. Freerick's contemplated amendment. It will not be published until it has been carefully considered by the different members of the Executive Committee. Its probable purpose, however, is to exempt retail merchants and the organizations of labor, in their coöperative and defensive methods, from the application of the Sherman law. The N. A. R. D. is not alone in asking for such an exemption. Organizations in other lines of retail trade have taken much the same position. We have before us, for instance, an appeal to Congress from the National Federation of Retail Merchants, asking relief from the hampering influence of the Sherman act.

From all these directions it has been declared that there are many price-agreements and restrictions upon trade which are really beneficial to the public welfare; that they serve to protect the great majority against the aggressions of a powerful and selfish minority; that the unbridled Sherman law really drives out free competition while it seems theoretically to profect and preserve it; and that some concession must be made to the thousands of retail merchants in all lines of trade who are seeking to protect themselves honestly against destruction. Whether a discrimination in favor of retailers or laborers would be constitutional we leave others to determine, but it seems as if something might be done, by one method or another.

* * *

"CHAIN" STORES.

A year ago our readers were fully informed of the amalgamation of interests which had been agreed upon in New York City between the Hegeman Corporation and the William B. Riker & Son Co., both of them owners of chains of retail drug stores. Not until last month, however, was the consolidation legally completed. The Riker-Hegeman Co. is incorporated under the laws of the State of New York for $15,000,000—which is quite an investment for one company to have in the retail branch of the trade!

We do not know just how many stores are owned by the corporation, but we are under the impression that there are over 60 of them, and the purpose is to add new ones to the chain from time to time as strategic points may be found. It was said some months ago, for instance, that a scout for the company had been looking over the field in Chicago, but in that instance had decided to stay out. Most of the Riker-Hegeman establishments are located in New York City, Brooklyn and Boston, but new ones have been opened during the last year in Paterson, N. J., Bridgeport, Conn., and Worcester, Mass.

The other big chain of retail stores is that

conducted by Louis K. Liggett and the United Drug Co. There are something like 40 stores in this group. The original plan was to have these included in the Riker-Hegeman amalgamation, but the effort fell through. Last month it was rumored that the Liggett interests had finally been pacified and absorbed, but this was vigorously denied by Mr. Liggett himself. It would seem that those two big chains of retail drug stores will be competitors of one another instead of otherwise.

In the meantime the United Drug Co. has succeeded in getting hold of its own stock formerly held by the Riker Company, so that Mr. Liggett is apparently free to take over the sale and promulgation of Rexall goods in New York and Brooklyn himself. He will do this by means of a number of stores which he proposes to open and conduct under the ægis of the United Drug Co.

* * *

THE TIPPING NUISANCE.

We observe that the commercial travelers of the country are at last making a determined stand against the tipping nuisance. They have been muttering and growling for years, but now they are beginning to do something. Here in Michigan an organization of traveling salesmen passed some pretty strong resolutions at its annual meeting a few weeks ago. More recently the Commercial Travelers National League, meeting in New York City, definitely decided to stop tipping hotel help, barbers, Pullman car porters, and everybody else. P. E. Dowe, president of the League, declared that "from now on the crusade against tipping will be waged in earnest, for we realize that the time to break the chains which bind is now or never!"

There is no doubt at all that the tipping evil is a national curse. To give a man 10 or 25 or 50 cents for doing something for you which he is not expected or otherwise paid to do, is not only a pleasure but a real obligation. On the other hand, to pay a horde of self-seeking hotel and railway menials for services for which you have already paid their employers handsomely, is in the abstract a rank shame and injustice. There is no real excuse for it. The worst of it is, many of the proprietors of the very best and most expensive hotels pay their help little or nothing on the supposition that the easy-going public will do it for them.

THE A. PH. A.

Elsewhere in this issue of the BULLETIN we are reporting upon the election of Prof. W. B. Day to the presidency of the American Pharmaceutical Association, and we are reproducing Professor Day's portrait and making some mention of the man himself. In this place it might be well to give the names of other officers for 1912-13 elected by the recent referendum carried on through the mails: First vice-president, Charles M. Ford; second vice-president, Caswell A. Mayo; third vice-president, C. H. Packard; members of the council: William C. Alpers, F. C. Godbold, and L. E. Sayre. The term of office of these men does not begin until the completion of the Denver meeting in August.

In the meantime we are reminded that the first issue of the *Journal of the American Pharmaceutical Association* made its appearance last month. Editor-Secretary James H. Beal is certainly to be congratulated on the showing. It is very evident that we are going to have in the *Journal* a high-class, carefully edited, progressive, thoroughly representative organ of scientific and professional pharmacy. But it will be no academic graveyard, as those who know Professor Beal can well believe. Red blood-corpuscles are not and will not be found wanting. It is made clear in the leading editorial, however, that the *Journal* will not attempt to enter the field served by the general pharmaceutical press, but will limit itself to the discharge of its mission as the official organ of the association, and to the promotion of the association's various and growing interests. Only "aseptic" advertising will be admissible, and if subscribers outside the association membership are secured, it will be for the purpose of increasing the membership of the organization itself.

* * *

MISBRANDED CASTILE SOAP.

In this department of the BULLETIN for December we dwelt briefly on some of the findings which had been made by Charles M. Ford in his capacity as drug inspector for the State of Colorado. We spoke, among other things, of a brand of Castile soap which was largely sold in the Denver market, but which, being made from cocoanut oil, was legally unsalable under the pharmacopœial title of "Castile soap." A Denver subscriber, who for

some reason does not attach his name to the communication, asks us rather belligerently why we did not mention the brand of the soap and the name of the manufacturer. We have since taken the trouble to look up the facts and we find from Mr. Ford's original report that the product he had in mind was "Bocabelli Castile Soap," and that the manufacturers were Jones & Co. of New York City. The point is that Castile soap made from any oil but that gotten from the olive is not in accordance with the pharmacopœial formula, and is therefore misbranded when given a pharmacopœial title. It may be legally sold in Colorado under some other name, but not under that prescribed in the U. S. P.

* * *

PROFESSOR CASPARI WATCH-ED.

Charles Caspari, Jr., for nearly 20 years general secretary of the A. Ph. A., was very pleasantly surprised a few weeks ago. It will be recalled that when Professor Caspari withdrew from the secretaryship at the Boston meeting last August, and refused a reëlection, it was voted by the Council to present him with a set of handsomely engraved resolutions of appreciation. Professor Remington, chairman of the Council Committee charged with the duty of getting up the resolutions, presented them to Professor Caspari not long ago at a little meeting held at the Hotel Stafford in Baltimore. This part of the programme, while thoroughly delightful, was after all expected, but the surprise to Professor Caspari came when he was afterwards presented with a gold watch and jeweled fob. These were the gift of 20 friends—some of the older members of the association who had done team work with the general secretary for so many years. Charles E. Caspari of St. Louis, son of the Professor, was present, and the occasion was one long to be remembered.

* * *

'PHONE CONDITIONS.

At this writing the telephone situation in New York City does not seem to have been corrected. So far the company has not conceded what the druggists want. The telephone people have announced a reduction in commissions from 20 to 10 per cent, and the druggists are insisting upon 30 per cent. The newly established Pharmaceutical Conference, representing all of the local associations, is making a systematic canvass to get every druggist in Greater New York to sign a promise to make no contract with the telephone company until the completion of pending negotiations entered into by the Conference Telephone Committee. There has even been talk of throwing out the 'phones unless the company came to terms. If the druggists stand together, as they are apparently doing, they can certainly get what they want—or at least what is reasonable.

* * *

TWO NEW DRUG CLUBS.

Last month we had something to say about the formation of the St. Paul Drug Club. Now we find that a similar drug club has also been organized in the Twin City of Minneapolis. Both of these clubs were primarily gotten up for social purposes, and each of them hopes soon to be able to support club rooms or other quarters. Active campaigns for the increase of membership are under way. The St. Paul Drug Club has outlined a series of dances, card parties, and the like to follow one another every two weeks during the winter, hoping in this way to get the families of the druggists together and to develop a social spirit among them. Ultimately, of course, both organizations will be in position to undertake legislative or other activities if such things become necessary. Why wouldn't such a drug club be a good thing in every city?

* * *

P., D. & CO. IN EUROPE.

We observe from reports in the pharmaceutical journals of London, England, that the European office of Parke, Davis & Co. in that city has recently been celebrating its twenty-first anniversary. From the speeches at the banquet it appeared that the total force of employees 21 years ago comprised Manager F. M. Fisk, Assistant Manager H. J. Fisk, and a stenographer. Now the force boasts of 570 people, housed in the European headquarters in London, in the laboratory at Hounslow, in the Russian branch at St. Petersburg, and at other strategic points in the United Kingdom or on the continent, not to mention the South African travelers, who are also under the jurisdiction of the London office. It would seem from these facts that the European business of this American house has grown to considerable proportions.

BUYING CLUB FAILURE.

One of the buying clubs among druggists has gone under. We refer to the Brooklyn Consolidated Drug Co., which has filed a voluntary petition in bankruptcy. It is now declared that the business of the club has been conducted at a loss. The assertion is made, however, that the assets and the bills receivable will cover all the indebtedness. Most of the bills receivable consist of notes of J. C. Wischerth, former manager and treasurer of the organization, and Mr. Wischerth is now being sued. The method of the club was to charge its members wholesale rates for supplies, plus 5 per cent for handling, and it was always said that this advance was sufficient in view of the fact that the business was carried on in connection with the manager's own store and therefore at a relatively slight expense. It would now seem that this was not the fact. Dr. W. C. Anderson was president of the company.

* * *

THE OWEN BILL.

To satisfy the demands of those who feared the curtailment of medical freedom in the establishment of a Federal bureau or department of public health, Senator Owen, the sponsor for the congressional measure proposing the department, has included in the latest draft of his bill a provision that the department shall have no power to regulate the practice of healing or to interfere with personal rights in the selection of medical attendance, and that no discrimination shall be made among medical sects in the appointment of the officials of the department. This will remove the great objection of most of those organizations and individuals who have protested against the establishment of a department of public health at Washington.

* * *

A JOKE?

Well, well, what do you know about this? Here are a number of physicians in Brooklyn circulating a petition asking the public not to patronize drug stores where sidelines are carried! The names of 57 physicians are said to be signed to the petition, and it is reported that 50,000 copies have already been circulated. Where is the man who once said that there was nothing new under the sun! It strikes us that this is a novelty *par excellence*. We shall not spend time in a vain search to discover any good reason behind this movement. It would scarcely be worth while, and besides we are quite busy this morning. There are some things that we find it hard to take seriously, and we hope the public of Brooklyn is of the same mind.

EDITORIAL

THE DRUGGIST'S PREPARATIONS UNDER FIRE.

In this era of pure food and drug reform the druggists of the country may just as well get ready to expect a more rigid investigation into the character of the medicaments found in their stores. Examinations are from time to time being made in practically every State in the Union, and in some instances the disclosures are not wholly complimentary to pharmacists. Down in Maryland, for instance, the Pure Food and Drug Commissioner is himself one of the conspicuous leaders in American pharmacy—Charles Caspari, Jr. It may well be expected that Dr. Caspari will discharge the duties of his office with friendliness towards the druggist, and without any of the narrowness and intolerance sometimes exhibited by officials ignorant of the real conditions.

At the last meeting of the Maryland Pharmaceutical Association, Dr. Caspari talked for a couple of hours on the conditions as he had found them in the State of Maryland since his appointment as Commissioner. Realizing that it is often an injustice to the druggist to take from his store articles which have been made by somebody else, and then hold him responsible for their character, Dr. Caspari explained that thus far he had for the most part been collecting and investigating the common substances and galenicals which druggists usually prepare themselves—or at least things which, if not made in the store, are easily susceptible of examination by the druggist. He really wanted to see just how far druggists were exercising care in the manufacture and handling of their supplies.

Tincture of iodine was one of the chief products examined, and of this 450 specimens were collected. The net result was the discovery of "an unwarranted degree of laxity on

the part of many druggists in the State." In some cases druggists defended themselves by saying that they did not know that tincture of iodine had to have any definite content of iodine itself, and in other cases they did not understand anything about the necessity of using potassium iodide in the product! In a few cases the tincture was being made by an old formula used in the store for forty years! More surprising still, however, a few druggists got sore after having had these derelictions called to their attention, and they determined "to get even with the Commissioner." Thereupon they made two different tinctures of iodine, one three or four times stronger than necessary, and this they supplied the inspector when he visited the store again, reserving the other for the ordinary demands of trade. How foolish and idiotic this was need not be pointed out. Neither is it necessary to explain that it is quite as bad to have a product too strong as too weak.

The conditions with respect to spirit of camphor were found by Dr. Caspari to be quite as unfortunate. Some of the druggists in the State are still adding from 20 to 25 per cent of water to this preparation. This makes it depart from the pharmacopœial standard, and it may not therefore be sold under the pharmacopœial title. It becomes legal only when the content of water is honestly stated on the label. As for the content of camphor, Dr. Caspari had found that, whereas it should be 10 per cent, it often ran as low as 5½ and 6 per cent, although in one case it was as high as 25 per cent. This was evidently another instance of somebody wanting "to get square with the Commissioner."

Altogether a total of 174 specimens of spirit of camphor were examined. In 93 cases the product was illegal. There were also examined 70 specimens of laudanum, and 49 of these were found below the pharmacopœial standard.

We are moved to point out one other condition of things disclosed in Dr. Caspari's talk. This was with reference to Seidlitz powders. On page 486 of the December BULLETIN we quoted Charles M. Ford, the well-known drug inspector for the State of Colorado, as finding that Seidlitz powders on the market were frequently much below weight. The same thing was touched on by Dr. Caspari, and it would seem that druggists all over the country need to be particularly careful about this product.

Dr. Caspari explained that 191 lots of Seidlitz powders had been examined. Of these 111 were illegal—either below weight or above weight. They had evidently been put up with a good deal of carelessness. According to the U. S. P., the blue paper should weigh 10⅓ grammes, and the white paper 2¼ grammes. In many cases the actual weights had been found to run from 20 to 25 per cent, and in some instances even 50 per cent, below the standard. Occasionally the amount of tartaric acid ran as low as 1½ grammes, while in other instances it ran up above weight to 3½ grammes! It was found that the prices varied accordingly. They ran from 15 to 40 cents a box, and Dr. Caspari contended that if he were back in the drug business again he would weigh his Seidlitz powders accurately, put them up neatly, and charge 50 cents for them!

Summing it all up, it would seem from these and other disclosures that many druggists are careless about the preparation of their own galenicals, and equally careless about those which, if bought from others, are very easy of determination. They must brace up if they expect to avoid trouble. To adopt any policy of "trying to get square with the authorities" is certainly absurd and ridiculous. Most of the commissioners want to be lenient—and certainly Dr. Caspari is in this class. So far no prosecutions have been made in Maryland, and the work has been purely educational. Druggists have been told of the conditions in order that they could improve them—in order that they could get in out of the wet. When warned in this way they should profit by the information and put their house in order. For the lines will steadily be drawn tighter and tighter as the years roll on.

GIVE THE CANDIDATE AN EMULSION TO MAKE.

An interesting discussion arose at the last meeting of the Missouri Pharmaceutical Association on the importance of having practical dispensing work form a part of the examinations given by the State Board of Pharmacy. The question was brought up by Dr. Francis Hemm. He argued that two years ago, when the new pharmacy act was placed on the statute book, the drug trade had been led to believe that an era of higher standards had been ushered in. He had failed, however, to

witness any particular changes, and he was strongly of the opinion that the Board ought to begin stiffening its requirements. He pleaded particularly for the introduction of practical dispensing work.

The members of the Board, some of whom were present at the convention, were rather inclined to oppose the proposition. They argued that it would take some time to arrange for practical examinations; they thought that such changes should be approached with due solemnity and without haste and speed; and they declared that dispensing work could scarcely be done anyway when the Board was moving about from place to place, since it involved the use of considerable apparatus and material.

Several speakers, however, were warmly in favor of the Hemm motion. Dr. Whelpley asserted that over in Illinois practical examinations had been conducted for many years. Why, asked he, should a mere river divide two sections of the country with such different qualifications and requirements? He quoted the late Senator Sherman as declaring that "the way to resume specie payments was to resume." He thought the way to have practical examinations was to have them. As for the difficulty of giving practical work, Professor Hemm pointed out that the St. Louis College of Pharmacy would be glad to place its facilities at the disposal of the State board. He believed that the Kansas City College of Pharmacy would be willing to make the same offer, so that in these two cities at least the Board could hold meetings for the examination of candidates where the equipment for doing practical work was available with very little expense and inconvenience.

The sentiment was so generally in favor of practical examinations that a resolution was finally adopted in which it was recommended to the State Board that the work be instituted "as early as possible in the future." There is no doubt at all that this is the right step to take. For ourselves, we have argued over and over again that one of the very best methods of disclosing the shallowness of the average quiz-compend crammer is to set him actually at work over a dispensing problem. The benefits, however, are not merely negative—they are strongly positive. The best way to determine a candidate's general efficiency is to see how he handles himself under those conditions which actually prevail when he is doing his life-work in the drug store. He should be surrounded with books and allowed to consult them; he should be given material and apparatus; and the atmosphere of the store should be duplicated so far as possible. He should be required to make emulsions and pills. He should be given prescriptions to compound. He should be given practical problems to solve. It will then appear pretty quickly whether he is a safe and skilful pharmacist or not.

The written and oral examinations should of course be continued. They are important. But they should by all means be supplemented by a practical examination. Fortunately this truth has been generally recognized, and to-day a considerable number of the boards of pharmacy are giving practical examinations of greater or less value. It is gratifying to know that the Missouri Board is going to get in line with this progressive movement.

OUR THREE PRIZE OFFERS.

We have had a number of contributions to the prize contests announced in the last BULLETIN, but we want a lot more. Here are the offers:

1. We shall pay $5.00 at once for every accepted article on "My Best Paying Side Line," and we can use quite a number of them!

2. We shall pay $10.00 for the best article, and $5.00 for the second best article, on "My Experience in the Sale and Fitting of Trusses." Only the two papers winning prizes can be accepted on this subject.

3. We shall pay $10.00 for the best, and $5.00 each for the two next best, formulas for a hair tonic.

We want to get some rattling good material in all three classes—and we know our readers can give it to us if they will only set themselves at the task.

Let us hear from you!

What rent ought a druggist to pay—that is to say, what percentage of the total business is it proper for him to spend for this item of expense? This is an important subject, and we should be glad to receive the opinions of our readers. Please give us your views.

THE HALL OF FAME

THE NEW PRESIDENT OF THE CANADIAN PHARMACEUTICAL ASSOCIATION.

The Canadian Pharmaceutical Association is a body somewhat like the N. A. R. D. on this side of the line, although its field of work is more extensive on the one hand, while its delegate representation is smaller on the other.

C. E. Nelson.

The new president of the organization is C. E. Nelson of Vancouver, B. C. While Mr. Nelson has retired from active connection with the drug business, he is keenly interested in all movements looking toward the elevation and improvement of the calling. He has been a delegate at every meeting of the C. P. A. since its formation some years ago, and his election to the presidency at the Montreal meeting last year was a tribute to his zeal and ability. The next meeting will be held in Mr. Nelson's own town of Vancouver during August of the present year.

Born in England in 1861, and serving his apprenticeship in three different stores in Manchester, Mr. Nelson came to Winnipeg in 1882. During the Northwest rebellion of 1885 he acted as hospital aid and dispenser with the rank of staff sergeant. Outside of this experience he was variously occupied in different stores between 1882 and 1886. In December of the latter year he established himself in business in Vancouver, and in 1892 he formed the Nelson Drug Stores, Limited. In 1900 he became a member of the firm of Nelson, Macpherson & Sutherland, later bought out his two associates, and in 1909 disposed of his business to W. M. Harrison & Co.

During the last two years, since his retirement from active business, Mr. Nelson has been a member of the Board of Park Commissioners of Vancouver, and among other things has devoted considerable time to the perfection of plans for the improvement of Stanley Park, which is said to be one of the finest natural parks on the continent.

PROFESSOR DAY ELECTED PRESIDENT OF THE A. PH. A.

The new officers of the American Pharmaceutical Association were announced last month. As usual, the election was carried on by mail, three sets of nominees having been submitted to the members. Professor Day won out for the presidency and will therefore assume the reins of power at the end of the Denver meeting in August, succeeding John G.

Professor Day.

Godding of Boston, who is the president for 1911-12.

Professor Day has for many years been Secretary of the Faculty, and Professor of Histological Botany, of the School of Pharmacy of the University of Illinois. This winter Dean Goodman is away on a leave of absence, and Professor Day is acting in his

place both as executive head of the school and lecturer in materia medica. The Professor has always been very much interested in association work, and for a number of years has been secretary both of the Chicago branch of the A. Ph. A. and the Illinois State Pharmaceutical Association. As a faculty associate of the late C. S. N. Hallberg, he was in close touch with the latter's work and assumed temporary charge of the "Bulletin of the A. Ph. A." after Professor Hallberg's death.

PROFESSOR MOERK MADE ASSISTANT DEAN.

Frank X. Moerk is now assistant dean of the Philadelphia College of Pharmacy. Professor Remington became so occupied with the work of the U. S. P. Revision Committee, and with other duties as well, that it was necessary to relieve him of some of his executive responsibility at the college. We learn from the "Bulletin of the P. C. P." that the assistant

FRANK X. MOERK.

dean has already "made effective a number of innovations in the administrative work of the dean's office which promise to make for greater efficiency." Professor Moerk has long held the chair of Analytical Chemistry in the college, is thoroughly in touch with the needs both of the students and of the institution, and is well qualified for his new position. The promotion of Professor Moerk, however, in nowise affects the courses presided over respectively by himself and Dean Remington.

A DRUGGIST AS COUNTY TREASURER.

Fred. T. MacDonald, a druggist of Kennett Square, Pa., was elected county treasurer last fall. Mr. MacDonald's candidacy was so popular that he won out by a majority of 4000,

FRED. T. MACDONALD.

even though there were three tickets in the field. For several years he had been a member of the borough council, and for more than fifteen years has been on the Republican County Committee.

Several druggists in San Francisco have recently been prosecuted by the Farbenfabriken of Elberfeld Co. for the sale of aspirin not made by this concern. It should be understood by this time that aspirin is protected by both trade-mark and patents, and that under this or any other name it may not be legally sold at all unless it is the particular product of the owners of the patent. This of course applies to the sale of acetyl salicylic acid. The chemical itself is patented, as well as the process for manufacturing it, while the title "aspirin" is trade-marked.

The most remarkable advertising "stunt" ever "pulled off" by a drug firm was recently worked in San Francisco by the Owl Drug Co., owners of several stores. They employed aviator Masson, the famous French bird man, to make a flight over their stores in San Francisco and Oakland.

It was announced that the aeroplane man would drop a package for the Oakland manager of the Company from about 4000 feet up in the air, but in the meantime he circled around both cities and flew about 30 miles. In our picture the crowds are shown watching for the package to be dropped.

It is perpetual summer out in California, and so these pictures indicating a ball game between the druggists of San Francisco on the one hand, and those of Oakland on the other, need cause no surprise in the middle of winter.

This is a picture of the winning team—the San Franciscans, with J. D. Elliott as manager, and "Jim" Lidley as captain. The Oakland team across the column was managed by H. B. Meader and captained by R. J. Cracker.

Here we have the two managers of the opposing baseball teams—H. B. Meader on the left and J. D. Elliott on the right. Carson Angel, a well-known Parke, Davis & Co. man on the coast, acted very successfully as umpire.

We fill out this interesting page with a picture of the new soda fountain installed in the drug store of Neuendorf & Schmick of Saginaw, Mich. The fountain is a Walrus, and was of course furnished by the Walrus Manufacturing Co. of Decatur, Ill.

A page of Odds and Ends.

Windmueller & Elich, proprietors of the Northwestern Pharmacy in Chicago, at the corner of Milwaukee Avenue and Robey Street, recently conducted their tenth anniversary celebration. Note the conspicuous white columns on the street, from which were strung festoons of evergreen to the building itself.

Here we have the same view of the outside of the store taken at night. The effect is most brilliant. Something like 1000 electric bulbs were strung along the evergreen and attached also to the white column. The store stood out conspicuously for blocks away.

This shows the interior of Windmueller & Elich's establishment, elaborately and handsomely decorated and trimmed for the anniversary celebration. The display both inside and outside was kept up for a month, and it proved to be a great success.

The Artz Drug Co., Red Oak, Iowa, has a remarkable store for a town of that size. The fixtures cost about $6000, and there is a stock of $15,000. The owners and officers of the business are D. Artz, D. W. Casey, and C. B. Artz.

Charles H. Jackson is proprietor of the Celina Drug Store in Celina, Texas. Mr. Jackson is presumably the gentleman standing by the door.

This is an interior view of Mr. Jackson's store. The establishment presents a neat and clean appearance and is a very representative store for a small town.

A page of Drug Stores.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

(*Continued from January* BULLETIN.)

CHAPTER II.

STARTING THE BALL ROLLING.

During the years that I had been working in the store as a clerk, I had been pushing a little all the time on this business ball. For the first year or two after I owned the place, I pushed a little harder, but thus far the ball had not started any. It seemed as if it was uphill in every direction. Subsequent reflection leads me to believe that the trouble was not so much the grade as it was the lack of a hard enough push.

The newspaper advertising that I had been doing was of the smallest sort; three inches, single column, once a week in two weekly local papers.

I decided to develop this kind of advertising farther, and I wrote advertisements for larger space and adopted a uniform style of arrangement for all of them. This was a single line head in plain, black letters, capitals and small letters instead of the all capitals often used in headings by inexperienced ad. writers. I used always the name "Farrington's Drug Store," and under this I wrote "Book Store Too," and under this "Your money back if you want it." The last was in italics.

The enlarged space made the advertisements large enough to attract more attention and the "Book Store Too" and "Money back" sentiments seemed to catch the popular fancy. Before very long my store became known as the Money Back Drug Store. I cheerfully put up with all the joking about it because of the value of the publicity.

About this time too I began to want to get to the people direct by mail with other advertising matter. A mailing list was obtained by writing down the names of the people on the different streets. This I did from memory. A better way of getting a list was to send a man or a boy around the town to take down the names of the families in every house. Where he did not know the occupants he could ask their names.

A FOLDER ON BRUSHES.

One of the first pieces of advertising that I mailed out was a four-page folder about brushes. It was 3½ by 6 inches in size. On the top of the first page was the caption "Brush Talk;" at the bottom my signature "Farrington's Drug Store, Delhi."

The third page contained a full-page halftone of one of the most attractive local scenes. As this was before the day of post-cards, the folder was valued for the picture. Opposite this, on page two, was the following copy:

ABOUT HAIR BRUSHES.

If hair brushes could talk, they would first of all say, "Keep us dry." If you cannot keep your hair brushes dry, keep them as dry as you can. They will last twice as long dry as they will wet.

Probably the brush most easily kept dry and clean is one with a solid wood back, or a so-called aluminum back.

Ordinarily, the more you pay for your brush the better it will be, and what is more, the cheaper it will be, too. The quality advances more rapidly than the price.

ABOUT PRICES.

The best way to get prices is to see the brushes and ask how much they are.

We cannot describe them well enough here. We have a solid back, ebony finish brush for 25c. It is a cheap brush but a good one for the price, best we ever had in fact. We have none cheaper. The prices are 25c, 30c, 35c, 38c, 45c, 50c, 55c, etc., up to $1.25.

The military brushes are $1.25 a pair, of

first-class quality, with ebony or light-colored backs. The aluminum-backed brushes sell for 50 cents and upward.

(*Money back if you want it*)

On the fourth page the following copy was used:

TOOTH BRUSH FACTS.

Tooth brushes are meant to be wet. You cannot wet them too much or too often. Water will not affect their backs or make their bristles come out. Use will bring the bristles out if they are not well put in.

Do not think that all the bristles that come from your tooth brush come out. Some break off. In a good brush they should do neither.

If you buy a cheap brush you may be certain that the bristles will pull out. A cheap tooth brush is no economy. By cheap we mean less than 25 cents. The bristles in a poor brush may get into your throat and cause trouble.

We make more money selling cheap brushes, but we prefer to sell good ones. We want satisfied customers.

Our 25-cent brush is a four-row, all-French-bristle brush. We guarantee the bristles not to come out.

We have better brushes, better and cheaper because they last so much longer, at 30, 35, 40, 45, and 50 cents.

For ten cents we will sell the best brush ever sold in town at that price.

(*Money back if you want it*)

It may seem that my ideas of hair brushes were not very high in point of prices, and they were not at that time; $1.25 looked like a good price for a hair brush, and it was seldom we sold one for more than 50 cents. It took time to get away from the cheap idea, and it took time to get the public away from it. But the sale of a dollar hair brush looked bigger then than the sale of a three-dollar one now. Of course I am speaking of plain wood-backed brushes, not fancy ones.

There are in nearly every town people that will buy the best if they can get it. In many instances they are sending away for high-class goods while the local druggist erroneously supposes there is no demand for them.

By adding better goods judiciously and advertising them to the class of people who can afford to buy them, the quality of business in any drug store can be elevated indefinitely.

Another use that I made of the half-tone plate, which had been made for me for use in the above folder, was as follows:

I had a supply of cards printed, 5½ by 7 inches, with the half-tone at the bottom. Under the caption to the picture I added "This is an advertisement of Farrington's Drug Store." At the top a hole was punched so that the card could be hung up. The heading said, "For the Housekeeper to Read."

Under this were four paragraphs of reading matter. Here they are:

Our BORAX Book would help you. Borax has a thousand uses—more, too, probably. It's good in the kitchen, good for medicine, for the bath, toilet, complexion, hair.

Book free telling all about it.

20 cents a pound, 5 cents a quarter.

* * *

CREAM OF TARTAR needs to be bought with care. Impure foodstuffs are bad foodstuffs. There is nothing in our cream tartar but what belongs there. The price is the best possible for the best goods.

50 cents a pound, 15 cents a quarter.

THE SAFE TOOTH BRUSH

The only safe tooth brush to use is the guaranteed brush.
There is no economy in a cheap one.
The cheap brush will shed its bristles and soon become worthless.
Our guaranteed brushes occasionally are imperfect but we will replace any imperfect one with a new one free of cost.
The good ones last until they wear out. The cheap ones only until they fall out.
If you are a singer, don't run the risk of throat trouble from a loose bristle stuck in your throat.
Any brush with "Farrington's Drug Store" stamped on it, is all right.
We guarantee all brushes bought of us, costing from 25c each up.
The cheaper grades we do not warrant. We give you the best value we can for the money and can do no more.
Remember that the more you pay for a brush the cheaper it will be in the end.

FARRINGTON'S, . . DELHI

WE'LL SAVE YOUR HAIR.

We keep everything the hair needs.
Brushes are the most important.
The prices are from 25 cts. up.
Brushes for babies' heads; for bald heads, for all sorts of heads. 50 cts. buys a splendid brush, more money buys a better one. Every brush is guaranteed.
We have a quinine hair tonic at 25 c. It is our own and it is warranted to keep your hair in. Try it thoroughly. It makes the hair clean and glossy.
You need combs as well as brushes. Comb prices begin at 5c. We sell the rubber combs, fine combs, course combs, barber combs, horn combs, metal back combs; any sort of combs you wish.
Use tar soap for shampooing your hair, 20c and 25c.
It pays to care for the hair.

Farrington's Drug Store.
Book Store too.
Money back if you want it.

The best disinfectant made is Chloride of Lime.
It is clean and easy to use.
This is the season when an ounce of disinfectant is worth a pound of fever medicine.

In Zinc Cans

It comes and we sell half pounds for 10c, pounds for 15c. All the other disinfectants are valuable. Sometimes one of them is better than lime.
Copperas 5c a pound.

Do you make or use washing fluid?
We put up the old ammonia and potash receipt every day.
The best lye to use is "Champion"
It is as strong as Babbits and costs less.
Champion 10c.
Babbit's 13c.

It's a Cleaner

and used alone is good to cleanse sinks and drain pipes.
We guarantee the Champion.

Farrington's Drug Store.
Book Store too.

Money back if you want it.

School books are expensive. We sell them as low as we can and live—you'll admit our right to live—but the publishers want to make too much money.
We'll take your second-hand books and if they're in good condition allow you half price. There's money in that for you. Old school books are soon out of date.
If it is a special

School Book

that you want we will order it for you We want your school book trade and will use you well.

About tablets for school use—that's where we shine. We have the biggest and best

5c Pad

on the market.
Our stock of last year's five cent pads is too large. We're going to close them out

For 4c

You've never seen as good tablets as the new ones are
Paper is cheap now and the result is good tablets for little money.

Farrington's Drug Store.
Book Store too.

Money back if you want it.

Some of Mr. Farrington's newspaper ads. when he was beginning to study the subject of advertising and was endeavoring to build up his business.

Every one knows the value of ROCHELLE SALTS. Don't be without some in the house. It will save many headaches and doctor's bills. It is the simplest of home remedies. No danger in using it. Be sure you get the best. We buy in original packages and we know it's pure. The price is

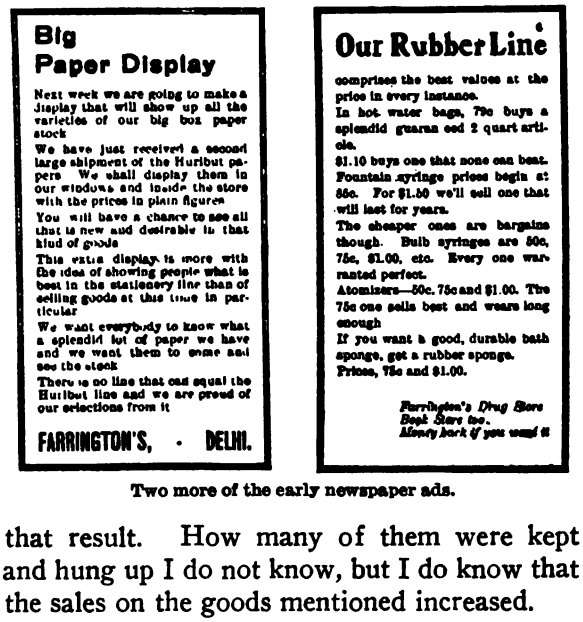
40 cents a pound, 10 cents a quarter.

* * *

BAKING SODA. That's a common enough article. It's common enough, too, for it to be adulterated with sal soda. Do you buy from a dealer who can tell whether his baking soda is or is not adulterated? Ours is pure.

10 cents a pound, that's the price.

These cards were handed out flat, and it was intended that they should be hung up in the kitchen. I thought the picture would produce



Two more of the early newspaper ads.

that result. How many of them were kept and hung up I do not know, but I do know that the sales on the goods mentioned increased.

MAKING THE MOST OF THE WINDOWS.

Along with all of my advertising I used the windows, such as they were, and made displays in them of the goods advertised. At first I started in to change and wash the windows every two weeks. But even before I began to have glimmerings of intelligence, I saw that they must be changed every week whether they were washed or not. In the end it resolved itself into washing and dressing each window once a week with occasional exceptions.

I believe that this use of the windows has done as much as any one thing outside of the newspaper advertising to develop the business.

My store was on the wrong side of the street. My hottest competitor was located nearly opposite with the best location in town. Most of the travel, too, was on his side, but he made poor use of his windows. Usually they were dressed with patent medicine dummies or something equally unattractive, and people noticed the difference between the trims of the two stores.

The ball was beginning to roll. People were coming in who had never come in before. They were beginning to find that I had the goods and that I sold them right. The advertising brought them in and the service held them. I made no play for personal poularity. I joined no lodges and did not work my church connections for business purposes. Many of my best customers in the end were people who did not like me personally, or people whom one might naturally think the other stores would have held for personal reasons.

The success of the store was a direct tribute to good advertising and proper store methods. The public cares more for getting its money's worth than for patronizing its friends and acquaintances or the members of its own lodge or church.

I do not say that it is not proper for a man to take advantage of such connections to advance his business, but I do say that that is not what they are intended for and it is not necessary. A man who joins any fraternal or religious organization for the money there is in it ought to be kicked out forthwith.

ONE UNPROFITABLE SCHEME.

Among the advertising plans tried and found wanting was the supplying of pay envelopes to a manufacturing plant. I supplied the envelopes free with an advertisement imprinted on them for a dentifrice, but I was never able to trace any results to this.

Of course there is no end of advertising that pays but produces no directly traceable results.

But I am pretty well convinced that advertising on pay envelopes is practically a waste of money.

Another form of advertising that is commonly conceded to be practically valueless is that on theatrical and fair programmes such as the village merchant is often besought to buy. However, I always made it a rule to take some space in every such thing that came along because it secured the good-will of the promoters. And if only a small space were taken, it did not cost much. A druggist can ill afford to offend a group of individuals or an organization in order to save the price of a small advertisement in a programme.

And one might just as well refuse to help

the programme committee along as to take the space and make a great fuss about having to do it and send away the promoter digruntled. Whatever you do, do it cheerfully and get all the credit you can out of it.

GOING AFTER THE SCHOOL TRADE.

Practically every village drug store and most others carry a line of stationery, and I found it profitable to go after the school trade along that line. One of the little schemes I tried was the following:

I had a supply of 3¼ by 6¼ cards printed like this:

HERE'S A PENNY!

Give it to the one of the family who starts for school first. It will buy a penny pencil at our store.

You might bear in mind, too, that we sell all sorts of school supplies.

We sell new and

SECOND-HAND

school-books at proper prices.

We want to get second-hand books in good condition. We'll take yours in exchange if they are books we can sell. Bring them in anyway. No harm done even if we can't use them.

FARRINGTON'S DRUG STORE.

I attached a new, bright penny to each of the cards and mailed them to the woman of the house wherever there was a child of school age. The list of "parents or guardians" was easily secured from the secretary of the board of education.

Most of the pennies came back, and many others with them. The plan was a great success at getting the children coming to the store. The values we gave them kept them coming. Children know very well when they are getting their money's worth, and they are always ready to tell the rest about the store that gives the most for the price.

A folder, 6 by 3½ inches, that brought me some good business about this time was one that I called a "Rough Weather" folder. The display lines were all printed in what is known to printers as "Powell," or "Cheltenham Bold," these being very similar. There were no capitals used except in the body of the text. This omission of capitals gave the job a rather unique appearance and probably attracted a little attention to it. Here is page 1:

some
rough weather
things

farrington's drug store
delhi

Page 2 was a follows:

what they are

The late fall months add many discomforts to life. We can relieve you of most of them.

We have all the best cold cures. If we brag a little here, remember that we are talking about our own preparations mainly. They are made from our formulas and we know what is in them.

white pine and tar

That is a cough medicine that really stops a cough. If it fails, you get your money back.

Nothing harmful in it. Pleasant to take; the children like it. We have sold it for years, more every year.

It doesn't cost much; 20c, 2 for 35c. Cheaper to buy than any of the patent cough cures. Better to use.

Page 3:

cold cream

Pure, clean and fragrant with the odor of the best imported rose-water. Nothing better than this for chapped lips and rough-weather complexions.

It nourishes the skin. Apply it at night, and in the morning sun-burn and wind-burn have disappeared.

You will find Parke, Davis & Co.'s name on this, and that means that there can be none better at any price. Big jars, very attractive, 25c.

velvet cream

It isn't sticky.

You can use it on your hands and draw on a glove almost immediately after. It is a liquid and more easily absorbed than a solid cream.

Fine for all chafed surfaces. 22c a bottle.

quinine pills

Heard of them before, have you? Well, we won't bore you long about them this time?

What have you been paying for them? We sell the best (P. D. & Co.'s) for 5c a dozen, 35c a hundred.

stop dentists' bills

Here is a dentifrice that makes the teeth clean.

No harm in using this. It's delightful in taste and effective in cleansing.

In tubes, easy to use, easy to carry, 25c.

The name? Euthymol Tooth Paste.

Page 4:

"Don't shoot," says Si, "it ain't no use.
It's Deacon Peleg's tame wild goose."
Says Ezra, "I don't care a cent,
I've sighted and I'll let her went."

Have you "sighted" some other drug store for

your "rough-weather stuff," or do our arguments appeal to you? If you are ag'in' us after reading this little folder, we shall be sorry but not discouraged.

one last word

Don't forget that we give you back your money if you want it. We say we'll do it and we will.

We want no dissatisfied customers.

farrington's drug store
delhi, n. y.

This folder was mailed to my increasing mail list, which now numbered some 600 families in Delhi and the surrounding farming country.

We often had calls for the goods advertised in our folders, the customers mentioning the folder, but a careful record of such calls never showed enough direct returns to pay for the advertising. Still the business kept increasing, and after all that is the true test of the successful advertising. If the business keeps growing the advertising must be paying.

I kept on the counter at all times plenty of neatly printed little slips for insertion into parcels. Here is the style of one of them that helped build up the demand for a headache remedy:

THE MAN

With The Head,

or the woman with the head, either is likely to have aches in that head.

Headaches are of frequent occurrence in every family. They happen in your family.

They don't often help the domestic machinery to run more smoothly. They are not as a rule productive of much happiness.

It is a good plan to have something in the house to stop the headache before it runs away with the head.

Make it a rule to have Farrington's Headache Tablets in such cases. They are but 10 cents a package and are guaranteed to stop any and all headaches and neuralgic pains.

If they don't cure, your money back and no questions asked. There is no other "just as good."

FARRINGTON'S DRUG STORE.

Book Store Too.

(*Money back if you want it.*)

This matter was printed across (the short way) a strip about 10 inches long, and so folded that before opening it showed only the heading, "The Man." Unfolded once, the next line showed, and finally the whole. The strip was 2½ inches wide.

My annual sales were crawling up—$4823; $5530; $6249; $6743. On the basis of the last figure my store expenses, including my own salary, which I figured at what it cost me to live that year ($657), were $1718. I bought goods to the amount of $4073. My inventory remained practically the same.

(*To be continued in March.*).

A MODERN STORE OPENING.

Conducted by Newell Brothers of Warren, Pa.—Over 4000 People Visited Their Beautiful Pharmacy—A Description of the Event and the Place Itself.

Newell Brothers of Warren, Pa., recently had their pharmacy remodeled. Desiring to call attention to the improvements that had been made, on November 16 they held a store opening. The event proved such a success that we feel our readers will be interested in the details. They show how a modern, effective opening should be conducted.

The Newell store impresses one with its richness and elegance, but unfortunately the engraving fails to show adequately the beauty of the interior, the fixtures being designed and supplied by Bangs. It would be a difficult task to describe in cold type the appearance of the establishment. Newell Brothers are said to have one of the handsomest pharmacies in their part of the State. At the opening the beauty of the place was enhanced by floral decorations of roses, carnations, chrysanthemums and other blooms with smilax artistically arranged and potted plants filling in between.

On the day of the opening Newell Brothers remained open until 11 o'clock at night. The event had been well advertised and 4000 people called. Souvenirs were given to all. The women received Whitman's candy, soda-water tickets, and perfumes, while a choice cigar, Euthymol tooth-paste, shaving soap, and soda-water tickets were presented to the men. To

describe more fully the inducements held out to visitors, a thousand souvenir boxes of

Come and Celebrate With Us

The Grand Formal
OPENING

of the Handsomest
Drug Store in the State

Newells' Pharmacy

Those who remember having read in the papers some few months ago of our contemplated big improvements, can satisfy themselves that these improvements were to be made for their benefit.

'Tis true that it has taken some little time for making this drug store the handsomest in the State, but we have given ourselves plenty of time to equip our store with everything new and make it come up to this standard.

That's the reason for the Grand Formal Opening—and a good time for everybody.

Thursday, November 16th

This will be the day of all days for the people of Warren. Such grand and glorious preparations have never before been made as those we have planned for this day. Therefore, we want you to be sure and give us a visit.

FREE—Dainty Souvenirs—Candy for the Ladies
—Cigars for the Men—something good for the little ones—and Gifts of all kinds.

So be sure to come and get your share of these Free Things. Something for every member of the family.

SEE INSIDE

A house-to-house distribution of this four-page folder was made a day or two before the opening. We show only the front page here.

Whitman's candies were presented to the women who called. Each man who came to the opening received a ten-cent La Preferencia cigar from the regular stock. To the children and grown-up folks as well, who attended the celebration, were given free tickets, each one good for a glass of soda water any time after the opening. The last offer, however, was restricted to children accompanied by an adult.

To make the evening hours joyful for the visitors, Newell Brothers arranged a special programme of popular and classical music.

A few special gifts were distributed to honor the big reception. The newly equipped store had been photographed at its best and a large number of prints ordered. One of these was given to every adult who visited the opening.

After two o'clock in the afternoon of the gala day, the first hundred women callers received a full 25-cent jar of Pura Cold Cream. All of these offers were of course announced in the folder distributed by Newell Brothers before the opening.

THE INTERIOR OF THE STORE.

The Newell Pharmacy has several notable features. The store fixtures proper consist of ten buffet wall cases, made of solid mahogany, with mirror backs and gold trimmings. The shelves are of plate glass, three-fourths inch thick on adjustable nickel brackets. The case doors are also of plate glass, sliding on roller bearings. There is a six-inch base of green Italian marble extending all around the room.

The soda fountain, always handsome, was especially beautiful with its floral decorations

The $12,000 pharmacy of Newell Brothers in Warren, Pa. The fixtures were designed and supplied by Bangs.

and art-glass lights. It was made by Bangs of Boston. The fixtures of this fountain are of glass and German silver. All pipes and coolers are made of pure block tin. The syrup jars are of solid porcelain, and the pumps are solid silver.

The counter of the fountain is made of selected Mexican onyx, inlaid with pieces of other onyx in various colors. The back bar and refrigerator are of marble and German silver. Surmounting the back bar are three large mirrors, and above is a heavy cornice of solid, hand-carved mahogany, with art-glass lights and lanterns. The top part is supported by four heavy onyx columns, five feet high, tapering from six inches in circumference at base to three inches at the top. A beautiful art-glass dome surmounts the fountain and is a suitable finish. The rail in front is also of Mexican onyx, and the latest ideas are shown in the electric mixers and carbonators.

The soda tables were made by the C. H. Bangs Co., of Boston. They have thick beveled glass tops trimmed with solid mahogany.

When the reader is informed that the total cost of this store's furnishings and soda fountain and signs was about $12,000, a fair idea is given of the place.

FLEXIBLE MIRRORS FOR SHOW WINDOWS.

Preferable to Glass in Some Respects—Can Be Handled or Bent Without Breaking—The Silvering Process with Full Directions that Any Druggist Can Follow.

By H. C. BRADFORD,
Nashville, Tenn.

It would seem that a flexible looking-glass is an impossibility, but it is not. The production of a mirror that may be bent into any desired shape or position is quite possible, nor is the process either difficult or costly.

These mirrors will prove to be of the greatest possible use in preparing backgrounds for show windows, and in other ways. The advantages of a mirror back are well known, but with the ordinary form the disadvantages are so many and so great that they are used but seldom. With this variety, however, all is changed. The mirrors can be put in and taken out as desired. They can be cut or bent into any size or shape, and as they weigh but a small fraction of what the glass ones do, they can be used in many positions and places where the latter would be impossible.

HOW THEY ARE MADE.

To produce these mirrors, the following materials are required: Some egg-white, the highest grade varnish, perfectly transparent, as nearly water-white as possible, and flexible or elastic. One of the high-grade floor varnishes is excellent for this purpose. A sheet of tinfoil, some mercury to form the amalgam, and lastly some paper are required. A good quality of cement is also needed.

Having obtained these, we proceed as follows: Take a sheet of good, strong, well-sized paper, of about the size of the finished mirror, and apply three to four coats of the egg-white, giving each coat time to get thoroughly dry before the next is put on. Use a soft brush in doing this, and make it as smooth and even as possible. When this has thoroughly dried, apply the varnish, on top of the egg, spreading it smoothly and evenly, and giving each coat time to dry thoroughly before the next is put on. It is best applied by flowing rather than brushing, as this makes it smoother. Continue to put on coats of varnish until it forms a body about as thick as a piece of ordinary glass.

Now take a sheet of pure tin-foil (and be sure it is made of tin too, as lead will not do so well), and smooth it out on a flat level surface until it is perfectly smooth and free from every vestige of a wrinkle. Then apply about four coats of varnish, in the same manner as previously described. When the last coat is dry, glue it with good strong glue to the paper that is to form the permanent back of the mirror. Some care is needed in selecting this paper, as it is necessary that it be flexible; but it should also be tough and capable of standing usage, otherwise the mirror will soon wear out. The best material for this purpose is "tag" paper. This is made

from so-called rope stock, which is nothing more than old rope and twine, and is very strong, tough, and durable. It is the material used for the back of the small advertising memorandum books. It comes in a variety of colors—red, green, blue, etc.

When the glue has dried, and the varnished foil and the paper back are by that means strongly united, turn the sheet over on a smooth level table and apply enough mercury to the other side of the foil to make a smooth amalgam. This will not require much. Apply the mercury a few globules at a time, and rub and spread it out with a small piece of chamois leather, rolled up into the shape of a ball, taking care that it is free from wrinkles on the outside. The mercury is best applied by rubbing lightly and gently with circular strokes, going over the entire surface smoothly and evenly.

PREPARING THE CEMENT.

With the amalgam completed, it is time to set up the mirror. For this we shall need some good strong cement that is perfectly transparent to unite the various parts. For this purpose there is nothing better than a saturated solution in distilled water of the very best quality of acacia in tears. Select those tears which are clear and transparent and with no signs of color. Dissolve them in the water and strain the latter through a piece of wetted muslin. It is a good plan to use a large excess of water, filter the solution through a flannel filter, and then concentrate on a water-bath. This will insure a perfectly colorless cement. If it is not desired to do this, gelatin can be employed, dissolving it in the usual manner. But the acacia is preferable, as it gives the strongest cement. With the latter on hand, take a soft brush and apply a very thin coat to the varnished side of the first paper, take it up carefully and lay it on the amalgam side of the foil, then with a roller such as is used in mounting photos, or some such instrument, roll it down until it sticks smoothly and evenly at all points, with no air bubbles or other defects. This done, it must be weighted down heavily and left for thirty-six or forty-eight hours until the cement and glue get well set and thoroughly dried. Pressure also insures a good contact between the varnish and amalgam; and since it is on this that the clearness of the mirror depends, the heavier the weighting is, the better will be the results attained.

A good plan after the varnish is applied to the amalgam is to lay a smooth sheet of paper over all, and on top of this apply a frame made by nailing smooth boards to a couple of pieces of 2 x 4 inch timbers, taking care that the board side, which goes next the mirror, is perfectly smooth and free from all nails, etc. The timbers will make it stiff and strong, and any sort of weight may be piled on top of it, with the certainty that the pressure will be alike at all points. Were the timbers omitted, or replaced with thin boards, the latter would likely spring or give under the weights, thus making the pressure unequal, and marring the beauty of the work.

THE FINISHING TOUCHES.

At the end of the time remove the weights, take out the mirror and lay it down flat. With a large brush or sponge, moisten the upper paper. It will be remembered that this paper was glued on with white of eggs; the moisture will soon loosen it up, when it can be peeled off, and reveal the mirror, all ready for use. If the work is carefully done, it will give results that will be surprising. Beautiful results may be also obtained by coloring the varnish slightly with various aniline colors, taking care however that the transparency is not lessened.

To read this article it may seem that a lot of work and time is required, but in reality this is not the case. It requires some time to complete the job, but the actual time employed in the work on it is comparatively little, since the drying and other such matters will go on without any attention whatever.

I have spoken of these mirrors as an adjunct of the show window, but they should also prove to be salable at good prices for many different purposes. In fact, they are of value in many ways not mentioned here at all, but which will suggest themselves to the progressive dealer.

In conclusion, remember that all things require some experience to get the best results, and this is no exception. Don't throw the matter aside because your first attempt is a failure. The material used costs but little, so the damage is not great. Try it over. Success comes only from effort, and the results in this case will well repay a considerable expenditure of time and money.

A LIVE ORGANIZATION OF CLERKS.

What the California Drug Clerks' Association Has Accomplished in Ten Years—The Record of Achievements is Quite Surprising in Nature and Extent—A Brief History of the Society, and the Men Connected with It.*

Inspired by a desire for closer relationship with their fellow clerks, and imbued with the hope that much benefit would result from better acquaintance and fraternal association, some of the moving spirits among the drug clerks of San Francisco conferred, and in April, 1901, sent out a call for a meeting of drug clerks to form an organization of the members of their craft. This meeting convened in Pythian Hall, and was called to order by Mr. W. H. Adair, who presided until permanent officers were elected. Much enthusiasm was manifested, and the conference resulted in the formation of what was for some years known as the San Francisco Drug Clerks' Association and the election of Mr. N. P. Wynne as its first president.

Gaining by the experience of other bodies which had been organized on social and literary lines, the drug clerks determined to make their association of such benefit to its members as would insure its permanency. That its founders reasoned well is evidenced by the history of the association. While others of similar character in various parts of the country have come and gone, this association, after a record of ten years, is stronger to-day than at any previous time in its history, and is, we believe, the only association of its kind in the United States that has been permanent. We have our own hall and offices as permanent headquarters, have a salaried secretary who devotes his entire time to the interests of the association, and our treasury is in excellent condition, with no outstanding obligations.

SOME EARLY HISTORY.

The first charter issued to the association by the Retail Clerks' International Protective Association adorned the walls of our club rooms located early in our history at No. 31 Second Street, where, owing to the long and late hours then prevailing in the business in which we are engaged, many largely attended and enthusiastic meetings convened at 10 P.M., and adjourned in the "wee small hours of the morning."

Shortly before the catastrophe which visited San Francisco in 1906, we moved to more commodious headquarters in Pioneer Hall on Fourth Street, where many of the valued archives of the organization were destroyed in the great conflagration of that year. Among these records was our first charter. However, upon the reissue of that document most of the original signatures were procured, and we find the following names on the charter under which we are working to-day: E. J. Molony, C. B. Whilden, A. D. Fretz, Phil. Weiss, F. A. Driscoll, J. H. Hubachek, F. H. Gray, Will E. Murphy, Fred. Graham, W. H. Adair, N. P. Wynne, P. A. Dubois, A. H. Hoag, A. E. O'Neill, George Gerard, W. H. Saey, J. A. Besby, and A. H. Mehrtens.

The following members have served the organization in the capacity of President, in the order named: N. P. Wynne, Paul Dubois, E. J. Molony, C. B. Whilden, A. D. Fretz, Prof. J. H. Flint, and at present J. S. O'Callaghan. Two of these gentlemen are no longer residents of San Francisco, but the other five are still actively interested in the work of the association, and have been largely instrumental in making it the success it is to-day.

The association flourished from the beginning, and as its benefits increased and the advantage of standing together was manifested, its membership grew until the hospitable hand of fraternalism was extended to our neighboring cities. So ready was the response in this direction, that the advisability of making it a State-wide organization was considered and decided upon, and in 1907 we received authority from the International granting us jurisdiction over the entire State of California, and giving us the right to change the name of the organization to that of the California Drug Clerks' Association, which is now the official designation, and which has enabled us to number among our members, drug clerks throughout the length and breadth of the "Golden State."

MORAL TONE.

While our association welcomes additions to our ranks, under no circumstances will we re-

*Reprinted from the *Drug Clerks' Journal.*

ceive into our membership persons who are not of the highest integrity, and more than one application for membership has been denied because the applicant could not satisfy the membership committee in this regard. Should a member be found derelict in morality, either by reason of excessive intemperance or narcotic habits, dishonesty or other cause, his resignation is requested or he is expelled. We desire membership in the organization to be synonymous with "character" in its highest sense. We stand for the proper deportment of our members and for the enforcement of the laws pertaining to our profession. We are strong advocates particularly of the laws relative to the dispensing of narcotic drugs, and the officials entrusted with the enforcement of these acts will receive our unqualified assistance and moral support, either by our influence in passing proper legislation, or in the execution of the statutes.

SOCIAL FEATURES.

Our organization has not been derelict in developing the social side. Our dances and picnics, our moonlight excursions and trolley rides have all been features of special enjoyment, and one of the crowning events has been our annual "open house" on New Year's Day, when with music and refreshments, decorations and entertainment, our headquarters have been thrown open to our friends that they might participate in our enjoyment on this particularly festive occasion. Nor are the sick or infirm forgotten on this gala day, for a committee is always sent to them with good cheer and words of sympathy and encouragement to brighten their weary moments.

PROPRIETORS.

One of the pleasantest features of our history, and one of which we are particularly proud, is our very harmonious relations with the proprietors. On many subjects we have sought their advice, and upon all occasions their coöperation, which has been generously extended to us in each instance, and we are delighted to feel that our relations with them are so cordial. They have always been invited, and have participated in our social events; our body has been addressed by them on subjects of scientific and commercial interest, and in conference with them on business topics we have always found them ready to assist us in attaining the objects which we sought. They have been granted, and have accepted the use of our headquarters on occasion, and the privilege of extending them such courtesies will always be our pleasure.

HELPING EMPLOYERS.

If in any manner it lies within the power of this organization to help our employers to increase the values received for the commodities they handle, we wish to assure them of our desire to heartily coöperate, for we realize that their interest is our interest, and as the clerk of to-day may be the proprietor of to-morrow, this is a further incentive to us to improve the conditions pertaining to the business side of our calling.

BOARD OF PHARMACY.

It is a matter of great pride that three governors of this State, viz.: Governors Gage, Pardee and Gillett, have honored the association, and shown their confidence in us, by appointing to membership on the California State Board of Pharmacy, clerks who were active members of our association, and that at the present time three members of this important commission are of our number. Brother Molony has been a member of the board since 1903, and Brothers Whilden and Sutherland have been connected with the board for the past six years. All of them have been as active in protecting the health and interests of the people of the State of California as they have been in promoting the welfare of the drug clerks. They have rendered a splendid account of their stewardship, and we are proud of them.

BENEFITS.

But let us see what the California Drug Clerks' Association has done that has been of real tangible benefit to its members, and first we will mention our

SICK AND DEATH BENEFITS.

A standing committee known as the "Sick Committee" is always ready to respond to the call of those in ill health; not only to visit them frequently and report their condition to the association, but also to see that their necessary wants are attended to, and to make provision for the payment of the sick benefit, which is five dollars a week for a period of twelve weeks, and in several instances aid has been continued for a much longer period.

Should the grim reaper visit one of our

members, his widow or family are visited, all aid possible extended, and if he has been a member in good standing for six months, his family receives a check for $25, and this is graduated according to the length of his membership to a sum reaching $200; the majority of the present membership is now entitled to this benefit in case of death. Should a member be without family and pass away, the last sacred rites are attended to by the association.

EMPLOYMENT BUREAU.

This feature has resulted in great benefit to our members, and to employers as well. It had its inception early in the history of the association, its object being to aid our members out of employment in procuring positions and to aid the employer in finding reliable help. This is done without expense to either party, is mutually advantageous, and is still one of the features of our organization which is much appreciated. But never were its benefits more strongly manifested than after the catastrophe of 1906. Owing to the destruction of so many drug stores at that time, the number of clerks thrown out of employment was very great, and the bureau proved of tremendous value in securing positions for them throughout the State.

THE FIRE AND EARTHQUAKE.

It was the terrible fire and earthquake which visited San Francisco in 1906 that demonstrated the spirit of fraternalism, that cemented the bonds of friendship, and that gave opportunity for the development of that great benevolence which has knit together the organization into a solid, united whole for all time. While mother earth yet trembled and the fires crackled and surged unchecked, "the boys" sought each other to offer such assistance and relief as the occasion permitted. It was the drug stores that were invaded by the authorities, drugs, medicines, and surgical supplies were needed for the afflicted, and the skilled services of the drug clerk were commandeered for the relief in hospital and camp. While serving willingly and faithfully at their respective posts, they managed in their moments of relief from duty to organize a "clerks' committee." Through the activity of our International Secretary Brother Max Morris of Denver (since gone to his just reward), and the generous response to his call, and also from the moneys sent to the State by the drug interests of the country, a very considerable sum was raised, which enabled us to help our many members in distress, not only for a day or a week, but to some very unfortunate ones it lasted for some time and was a godsend, for many lost their all. In a number of instances money was advanced to aid a sufferer in getting on his feet again. In some cases this was returned; in others, where refund was impossible, the obligation was cancelled with a hearty Godspeed.

THE TEN-HOUR LAW.

For years past proprietors as well as clerks have felt the burden of the long hours required by our calling, and all agreed that such long hours were not an absolute necessity. No one knows better than the clerk behind the counter how physically exhausted and brain-weary one grows after fourteen or fifteen hours of almost consecutive work in a drug store, and that these long hours in such responsible work become, by their effect upon the clerk, a menace to public health. Our organization, therefore, determined to ask legislative aid in procuring relief. After advising with some of the older heads among the proprietors, including Prof. Wm. M. Searby, Messrs. S. A. McDonnell, E. L. Eschmann, Isaac Grant and others, and receiving their sanction and moral support, a bill was drafted, and by Hon. Edward I. Wolfe, State Senator from San Francisco, was presented to the legislature. In 1905 the legislature passed this bill, it was signed by Governor Pardee, and became effective in April of the same year. This measure became familiarly known as "the ten-hour law," and from the date of its enactment the drug clerks of California were required by statute to work "not more than an average of ten hours a day or sixty hours a week of six consecutive calendar days;" thus in helping ourselves, we were able to extend the benefit of shorter hours to clerks who were not affiliated with us, and what was of far greater importance, give the protection to the public which the better physical condition of the dispenser enabled him to render.

SUNDAY CLOSING.

In the history of pharmacy it has been the wonder, not only to the proprietor and clerk, but to the public as well, why druggists should be compelled to work all day Sunday. It was left to the California Drug Clerks' Association to make the investigation, and upon their

initiative the problem was solved. Some of our active members took the matter up with the proprietors, and with the coöperation of gentlemen standing high in the pharmaceutical and business world, such as Prof. Frank T. Green, Messrs. Val. Schmidt, J. J. Mahony, E. L. Baldwin, Frank Gay, *et al.*, who willingly gave not only their time but their influence, an arrangement for Sunday closing was consummated with the two hundred odd drug stores of San Francisco, most of whom close between the hours of 1 and 5 P.M., and some from 1 to 6 P.M., on the Sabbath. It did not take long for this example to be followed by our neighbors across the bay, and in Oakland, Alameda and Berkeley the same rule is followed. Stockton, Sacramento, San Jose, and Los Angeles have fallen in line, and in many of the interior cities and towns those who are engaged in the dispensing of drugs and medicines are reaping the benefit of the good seed sown by our association.

INCREASED COMPENSATION.

With the increased cost of commodities necessary in the expenses of life, which has been experienced all over the country, it seemed hardly reasonable to ask a drug clerk, who has to devote five years to practical experience, also a vast amount of time, money and mental energy in acquiring an adequate knowledge of such a technical business as pharmacy, to accept in consideration for his services a compensation that was entirely inadequate to meet the demands, and in no way proportionate to the wage paid in many lines of work of no technical character, and with little or no responsibility attached. The association, therefore, decided to make an effort to procure an increased compensation for those employed in a clerical capacity in pharmacy. Not desiring to assume a dominant attitude, however, they took this question up with the proprietors, enlisting their coöperation and requesting their views. With this end in view, a communication was sent to a very large number of proprietors asking their ideas on the subject of compensation. The number of replies received was exceedingly gratifying, and upon tabulation it was found that 78 per cent were in favor of the following schedule, viz.: for Licentiates in Pharmacy a minimum of $100 per month; for Registered Assistants a minimum of $75 per month; for relief work, 50 cents per hour. This schedule was adopted as the minimum of the association, and has been effective ever since March 1, 1907.

SUMMARY.

To briefly summarize the benefits accruing by the organization of the drug clerks of this State, we give the following:

(1) Shorter hours. (2) Better compensation. (3) Financial sick benefits. (4) Financial death benefits. (5) Sunday closing. (6) Employment bureau. (7) Social and fraternal features. (8) Representation on the Board of Pharmacy.

CONDUCTING A DRUG-STORE OPENING.

How Long Before the Event Should the Advertising Be Started?—What Tone Should the Publicity Have?—Some Ads. which Have Been Used by Retail Druggists to Announce Their Openings.

A store opening represents a means of making a dramatic and effective entrance upon the public stage. And as the star who enters a play at the psychological moment has the way carefully prepared for him, so the audience of a store must be worked up to a state of expectancy before the event occurs. Continuing the comparison, druggists who would make the most of an opening must have the stage dressed, their tableau ready, their preliminary lines spoken, their audience expectant if the event is to make any special impression.

This confronts us with the question as to how long before an actual opening the druggist should begin his preliminary advertising. Writing in *Printers' Ink*, George Hough Perry, a prominent advertising expert in the East, observes that too long a preparation, a suspense too long drawn out, will lose one the keen attention of the public. On the other hand, an entrance too abrupt, unexpected, and too early will find the public unready and cold. No definite rule can be laid down. Each case must be decided on its own conditions, but the

time should be long enough to enable the proprietor to deliver his message. Four days may be sufficient. Often two days will do, although some take a week for the preliminary advertising. B. S. Cooban & Co. begin advertising ten days before their regular annual opening, as do many other firms.

Having determined the date of the announcement, the next detail to be considered is what tone it shall take. This question can best be answered by actually reproducing specimens of advertisements that have been employed by retail druggists for their openings.

Mr. Barrett, of Waukegan, Illinois, conducted a grand opening in which he gave away prizes of candy and cigars. The conditions under which these gifts were distributed may be seen from the cover of their four-page announcement. It read as follows:

GRAND OPENING

OF

Barrett's Drug Store

WAUKEGAN, ILL.

on Friday and Saturday
Oct. 18th and 19th

A COMMERCIAL EVENT THAT IS BOUND TO CREATE MORE THAN PASSING INTEREST

FREE FLOWERS | FREE CANDY | FREE CIGARS

Great Values on Opening Day OCTOBER 18th & 19th

LADIES

EVERY lady who calls on the Opening Day will receive a blue numbered ticket. On Monday, October 21st, we will open the large blue envelope displayed in our store and post the 5 unknown numbers which it contains. Each of the 5 persons presenting a blue ticket bearing one of these numbers will receive a fine fresh 1-pound box of Craftsman Guild Home-Made Chocolates.

YOU MAY WIN

Surprise Bag FREE

To every caller upon the Opening Day we will present with our compliments a Surprise Bag containing many——? Ah, that's the surprise! Don't fail to get one and you will be delighted with your surprise

Remember the days of the Opening

FRIDAY and SATURDAY
Oct. 18th and 19th

SPECIAL PRICES
SPECIAL FEATURES
in a modern, progressive drug store

Barrett's Drug Store
WAUKEGAN, ILL.

Great Values on Opening Day OCTOBER 18th & 19th

GENTLEMEN

EVERY gentleman who calls upon the Opening Day will receive a red numbered ticket. Monday, October 21st, we will open the large red envelope in our store and placard the unknown number therein. To the gentleman who brings in the red ticket bearing this winning number we will present a box of

Ben Bey
Clear Havana Cigars

YOU MAY WIN

The cover of a four-page folder distributed by Barrett's Drug Store, of Waukegan, Ill.

Every visitor received a surprise bag free, as was cleverly announced in the circular: "To every caller upon this opening day, we shall present, with our compliments, a surprise bag containing many—? Ah, that's the surprise! Don't fail to get one. You'll be delighted."

A preliminary announcement is of course advisable. The first ad. or circular should appear about ten days before the opening after the manner of the following:

WAIT AND WATCH
for the
GRAND OPENING
of
BARRETT'S DRUG STORE
Waukegan, Illinois.

This will be an Opening of far more than passing interest. Preparations are under way to make this affair an assured success. For we want everybody in Waukegan and vicinity to appreciate the

New Ideas, New Methods and New Atmosphere

that will make this a first-class progressive Drug Store in every sense of the word. Your money will do its utmost here—always with goods that are standard and reliable, and on the Opening Day there will be

Free Candy, Free Flowers
Free Cigars
Free Surprise Bags

And the date of the Grand Opening is

October 18 and 19, 1907

BARRETT'S DRUG STORE
Waukegan, Illinois

COMING

The biggest "Coming Event" in this town—the happening that is going to make everybody "sit up and take notice"—the one occasion you mustn't miss "nohow" is

_____'s

Souvenir
Day

Saturday, February 17th, is the date—put a big mark around that day on your calendar so you won't forget—you'll be mighty sorry if you do forget.

Specimen ads. or circulars to be sent out about 10 days before the opening.

Two days later, or about the eighth day before the opening, the advertising becomes more specific, the following text being very suitable:

Have You Heard About It? Make a Memorandum Regarding the
GRAND OPENING, OCTOBER 18th & 19th, 1907
OF
BARRETT'S DRUG STORE, WAUKEGAN, ILL.

Free Flowers - Free Candy - Free Cigars

Free Surprise Bags

—Extra Preparations Being Made for this Event—

In order to fittingly prove to the public of Waukegan and vicinity that in Barrett's Drug Store there is a business institution operated on the very first principles—that it is aggressive, progressive and in every respect up-to-the minute we shall on

OCTOBER 18TH AND 19TH HOLD A GRAND OPENING
TO WHICH YOU ARE CORDIALLY INVITED

FREE! Flowers; Candy; Cigars; Surprise Bags. FREE!

There will be special prices for that day as well as many special features. If you want to see an interesting mercantile event come around; if you wish to observe how a strictly first-class Drug Store is operated, pay us a call. If you want to save some money in Drug Store purchases don't overlook us this day.

FREE! Flowers; Candy; Cigars; Surprise Bags FREE!

BARRETT'S DRUG STORE,
201 GENESEE STREET. MURRAY BLDG., WAUKEGAN.

A newspaper ad.

T. A. Goodwin on purchasing a store in St. Louis, Michigan, observed his entrance into the new place with a formal opening. The

general character of the celebration may be seen from the following announcement, which appeared in a folder printed especially for the occasion:

FREE SOUVENIRS FOR ALL

EVERY VISITOR—old and young of both sexes—who comes to my new store on Opening Day will receive a beautiful **FREE SOUVENIR.** There will be souvenirs for the Ladies, souvenirs for the Gentlemen and souvenirs for the Children. There will be Free Candy, Free Perfume, Free Toilet Preparations, Free Cigars, Free Cigar Cutters, Free Match Boxes, Free Novelties, Special Offers, and many other features which will make this Opening Day an event long remembered in St. Louis. Do come in on Opening Day.

Souvenirs for Ladies—Souvenirs for Gentlemen—Souvenirs for Children

Free Candy—Free Perfume—Free Toilet Preparations

Free Cigars—Free Cigar Cutters—Free Match Boxes—Free Novelties

Of course, Mr. Goodwin took pains to impress upon people through his advertising that the store had been overhauled from top to bottom. He assured his customers that many changes and improvements had been made, and impressed upon them the completeness, freshness, and superior character of the stock. All this was accomplished through the medium of a four-page folder 7 by 10½ inches in dimensions. The paper was blue, the type a dark shade of the same color.

A formal invitation can be sent out to a restricted number of people, one on this order, for example:

Your presence is cordially invited at our

GRAND OPENING

FRIDAY AND SATURDAY

October 18th and 19th

During which flowers, souvenirs, special sales and many unusual attractions will be in order. Particulars may be had from our circular of information.

BARRETT'S DRUG STORE

Genesee and Madison Sts.
Waukegan, Illinois

B. S. Cooban & Co., of Chicago, have even used a huge bill-board ad. 2⅓ feet wide by 3½ feet high. The paper was white, the letters being done in blue and red:

COOBAN'S

GRAND

FALL OPENING

OCT. 5-6-7

Free Souvenirs
Free Perfumery
Free Candy
Free Cigars

Splendid Specials

Wonderful Values

B. S. COOBAN & CO.

459 W. 63d Street,

CHICAGO, - - - ILLINOIS

In the November BULLETIN, 1911, we described an opening conducted by the Cahoon-Lyon Drug Co. of Buffalo. Flowers and toilet articles were given away free as souvenirs to the visitors. At the soda fountain a popular drink was served free. In many departments valuable presents were given to purchasers. More than 10,000 roses and asters were given away throughout the day, and toilet souvenirs were distributed liberally. The various sections of the store were arranged in an attractive fashion, and the clerks did a record-breaking business. This only goes to show that an opening can be made the means of stimulating business.

During the opening of the new Cahoon-Lyon store 5000 hot-air balloons were released on the roof. Each balloon contained a check good for a certain sum of money when presented at the new drug store. These checks ranged in value from ten cents to $10, and were eagerly looked for in all parts of the city. Finders of the checks from the Cahoon-Lyon Company balloons could exchange them for currency or merchandise, according to the statement contained on the paper. Checks were received at the store.

STOPPING LEAKS IN BUSINESS.

A Retail Druggist of Long Experience Shows How Losses of One Kind or Another Can Be Prevented—A System of Stockkeeping Whereby One Can Tell the Amount of Merchandise on Hand Each Day.

By JULIUS DEETKEN.*

Now, what I am going to tell you comes from an old druggist who has been in active business forty-one years, who is nearly at the end of his active business life, and who considers his system of discovering and preventing leaks and losses almost perfect for a small drug business.

This old druggist, who has in a moderate degree succeeded after many reverses and some crushing financial disasters, in accomplishing that for which we all put forth our best efforts, namely, to spend old days in peace and comfort and free from any financial worry, gives you now his experience in that direction. But this is not in a spirit of boastfulness. Far from it. He has no doubt that some of you here have as good or a better system. He expects that his system will be criticized and that some one, at some time, will offer you something much better.

If I can to-day, by giving you my own approved system, assist any of you in making your burden lighter and your bank account heavier, I shall feel amply rewarded for my efforts.

Many of the losses and leaks in business which we see occasionally mentioned in our drug journals are a negligible quantity and I shall not take any notice of them to-day. The leaks and the losses may be divided into two classes, to-wit:

First, losses and leaks caused by others.

Second, losses and leaks caused by ourselves.

Right here I confess that I failed and fell down in most of those side-lines of which some of you have made a most decided success, and that the volume of my business, with the exception of a few years in Deadwood from 1877 to 1881, was distressingly small.

MAKING A SMALL BUSINESS PAY.

I soon realized that the problem before me was to make the most out of a naturally very small business, and to look for my success, not in enlarging my business, but in getting every cent out of this five- or ten-cent patronage called the drug business. I had to squeeze that lemon dry to the last drop to make a good decent living, and to lay up a few dollars for the rainy days that come to us all.

Very early in my career I ran up against a very dishonest clerk, and I at once began to work out a system by which I could discover and stop a stealing clerk. My system, which I have practiced now more or less for over thirty years, and which I have perfected, so that during the last fifteen or twenty years I have had no occasion to change it, is an absolute prevention and cure for this evil. It is best adapted to stores with one or two clerks. For those of you who have a larger number of clerks I would say this, you can discover the leaks, but you cannot fasten it on the thief. I will also say here that in spite of my system, you cannot stop a man from stealing for a short time, but you can discover the leak inside of a few months and stop it then. Then, too, the fear of discovery will stop a thief from stealing as soon as he gets familiar with my system. No man can steal in my store for more than a few months without the fact being discovered by me. You are all familiar with the case of a trusted, confidential clerk in a large town in eastern South Dakota, who carried on this stealing for many years and robbed his employer, during that time, of many thousands of dollars. That same clerk was working for Bent & Deetken in Deadwood long before he was discovered to be a thief in the eastern part of the State. But I assure you he did not steal when he was working for Bent & Deetken. He was afraid of our system.

My system answers completely the following purposes:

First, you always have cost prices of goods at your finger-tips.

Second, at the close of each business day you

*A paper read before the last annual meeting of the South Dakota Pharmaceutical Association.

know to a cent what you have sold, the cost of what you have sold, your gross profit, and your net profit.

Third, at the end of your business day you can find out if you wish, to a cent, the amount of merchandise on hand that day.

I verify the correctness of my system by taking invoice once a year, generally in January. I balance my merchandise account and write on a sheet of paper the amount shown in ledger to be on hand that day, and put the paper in a sealed envelope. I let two men take the invoice and figure it up. At the end of the work, I hand them the sealed envelope to compare their footings with my figures, and usually the discrepancy is not more than $50 or $75. If you have a leak in your business that has not been detected during the year, it must show up at the time of invoice. The key to my system is a sales-book ruled with three columns, one for cost, one for selling price, and each article sold, cash or credit, is entered. To illustrate:

You start on January 1. Your sales-book shows that you sold that day	$20.00
Your day-book shows that you sold $3.00 credit, so you deduct	3.00
Leaving a balance of	$17.00
Your day-book shows you collected that day	5.00
Adding this gives you the result that must be in the till	$22.00

Plus a few minor omissions of 75 cents to $1.00.

You see if you omit to enter any sales on your sales-book, your cash must over-run, and in place of $22 you will have $23 or $24 cash in your till. This is normal. If you run short, then look out for leaks. You may run short once in a while by making a sale, say about $1 or $2, on credit, entering it on the sales-book but neglecting to charge it in the day-book. By my system a loss of that nature, due to carelessness, is discovered.

By way of a second illustration, I submit the following figures. They are hypothetical, of course. They show how it is possible for you to know every night, to a cent, what you made or lost that day:

January 1, your total sales I suppose to be	$20.00
Cost of your goods as per cost column	10.00
Leaving a gross profit of	$10.00
Less your total expenses	5.00
Your net profit is plainly	$ 5.00

Apply this rule or system to your monthly or annual sales, and you have the exact result of your business, provided there is no leak.

Let me illustrate a third time. This is the most important and gives you an absolute check on amount of merchandise you have on hand each day:

January 1, amount of merchandise on hand	$1000.00
Added to stock during the twelve months, at the rate of $300 per month for new goods	3600.00
Add these and they amount to	$4600.00
Now deduct (or credit) sales $20 per day, cost $10, or $300 per month or $3600 per year. Carry out	3600.00
December 31, on hand	$1000.00

If you run short more than $50 there is a leak. Some one robs you or you rob yourself.

My rule is to check up the sales every day, figure up monthly sales, gross profits, net profits, cost of goods, credit the merchandise account by the cost of goods sold, debit the merchandise account to the amount of all goods received during month, and strike a balance to show the amount of merchandise on hand on the last day of each month.

LOSSES DUE TO SELF-INDULGENCE.

Now we come to losses and leaks caused by yourself and how to stop them. Suppose you, Mr. Druggist, are a smoker and take a seven-cent cigar five times a day out of your cigar case, without paying for it because it is such a small item.

Five cigars per day, costing seven cents each, amount to thirty-five cents a day, or, in the year, to	$127.75
Your family eat ice cream, drink soda water, etc., "on the house," May 1 to September 1, 135 days at 25 cents per day, amounting to, during the season	33.75
Your wife and children take hair brushes, tooth brushes, soap, toilet articles during the year that cost about	40.00
Figuring up, these things cost per year	$201.50

Now, you are short $201.50 in your merchandise at the end of the year, and you can and must stop that by charging every item taken for yourself and credit your merchandise account at the end of the year by $201.50 and charge your family expense account $201.50. Or still better, and it saves you a lot of entries, do as I do. Pay the cash, a little above cost, into your till every time you and your family take ice cream or cigars, or whatever it may

be, out of your stock. Then this leak is stopped.

Another form of robbing yourself is if you allow any doctor to help himself to cigars or drinks or other small items whenever he sees fit, because he sends you two or three prescriptions a day. Do not do it. It is easy to rob your stock of fifty cents per day or $182 per year this way, and it is a big mistake. If your doctor is entitled to any such benefits and wants them, give him the cigars and drinks, etc. Pay for it yourself and charge it up to expense account. This will keep your merchandise account straight.

Now, Mr. President and Fellow Druggists, I will say to you before I close that if I had to point to any one thing to which I owe my moderate degree of prosperity, after all my ups and downs, I would point to my system of discovering and stopping losses and leaks. It has never failed me, and I intend to keep it in use to the end of my business life.

My system of sales-book enables me to know every night to a cent what I have made or lost. My system of keeping merchandise account enables me to know every day of the year the exact amount of merchandise I ought to have on hand, and in two days I can, by my invoice, verify the figures in the ledger and discover the leak.

There are many other ways that help a druggist to detect pilfering. A friend of mine discovered stealing in this way: He left just $5 change in the till at the close of business. Then he hired a person next morning early to buy $3 worth of goods in his store. Then he stepped in and counted the money. The till had just $5, and the guilty man was discharged.

Another friend of mine is using the following tactics: He always keeps wrapping paper and twine of different colors from any of his competitors. If he is on the street and meets a person with a white paper package tied with pink twine, he knows that the package comes from his store. He goes up to his sales-book, and if he finds the entry he knows everything is all right. If not, he becomes suspicious and usually discovers the leak and stops it.

Another friend of mine who is using my system discovered a big leak as follows: One of the help, it seems, was in the habit of pocketing money that came in after the proprietor went home at night. He took $3 one night. Next day the customer brought the goods back, as it was not what he wanted. My friend looked at the sales-book. There was no entry of a sale, and there was no over-run or surplus of $3 the night before. My friend said nothing, but stepped out of the store for half an hour. He came back, looked at the sales-book, and found that in his absence some one had attempted to "doctor" the sales-book in a bungling manner. The guilty man was discharged.

HANDLING CREDIT BUSINESS.

Now, in regard to credit business, I have succeeded in reducing it to a minimum. It is one of the comforts of my old days. I have not been out collecting nor sent a clerk out for the past four or five years. Now I think every store has to handle this branch of business to the best possible advantage, according to circumstances.

The druggist who lives in a small town where he knows everybody and is doing a good prescription business can hardly avoid doing a big credit business. But a druggist who is doing a very small prescription business is not obliged to let goods go out of his house on credit. I send all of my bills or statements through the mails. I have always a few lame ducks on hand, and I use very plain language when I am telling them my rules about credit. I do not allow my clerk to give any credit except to good people. As a last resort I give my bills to a justice of the peace and usually collect them by bluff, hardly ever by suits. My net losses have been about $30 per year for the last ten years on bad accounts. I try to be a good payer and a good collector. There is no set rule about collections in my store. I consider each case by itself and use different kinds of strategy, according to my own judgment, and people in Deadwood call me as good a collector as I am a payer.

Now, in Lead, conditions are entirely different. They are all doing a big credit business and everybody promises to pay on pay-day. Nobody pays on the first of the month. The Homestake Company pays off their three thousand men at the rate of about 200 per day for fifteen days, commencing on the 8th and quitting on the 24th. The trick in Lead and Brown is to catch the debtor on his pay-day; for the chances are that one or two days later he will not have a penny, and you will have to wait another month.

In the early days of Deadwood, we had an

entirely different custom in regard to credit and pay. We sold goods on credit to everybody who wanted them, and the test of a man's quality as a payer came every Monday. Monday was pay-day, and you could see everybody go around collecting, with buckskin sacks to carry the gold-dust in. A man who did not pay on Monday lost his credit promptly.

A NEAT VALENTINE WINDOW.

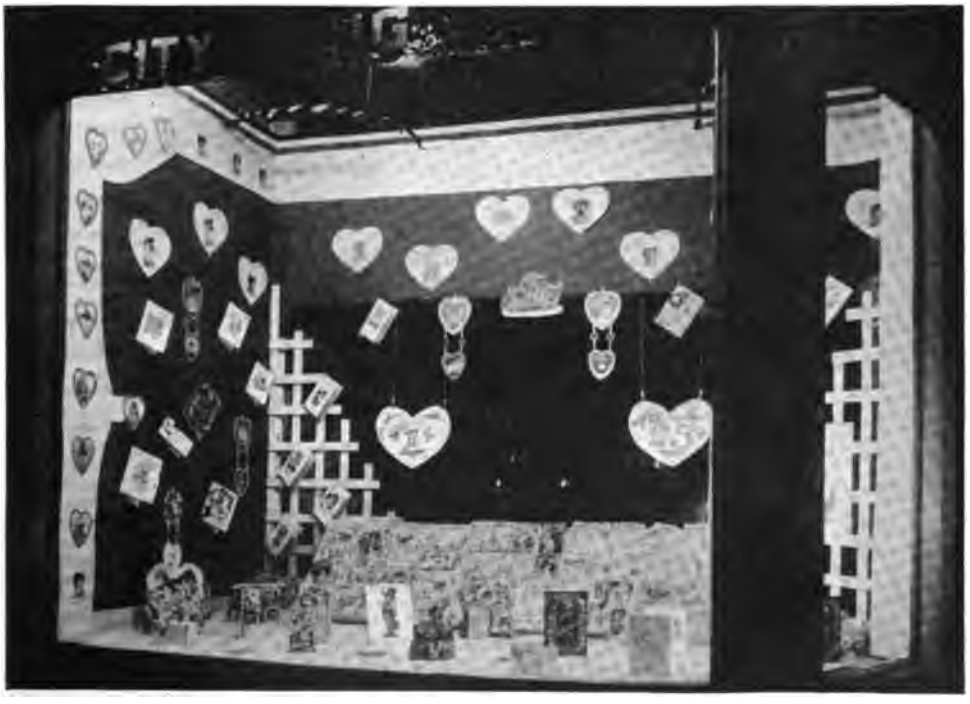
By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Last February I arranged a very pretty window display of valentines. It was simple, too. I took pains to avoid the use of too much material.

Valentines of a heart-shape design gave a nice effect to the trim. In the center, arranged on inclined steps, appeared four rows of beautiful post-cards patterned after the fashion of fancy valentines. They were of the better sort, the prices ranging from one to 25 cents. Some care was given to the background, too. It was made of dark-red paper and then trimmed with white. In the corners was latticework painted white.

At the top of the trim I arranged the smaller valentines on cut-outs that resembled hearts. They were cut out of white heavy cardboard and hung on the background, and showed up very well against a somewhat wide red border.

Taking it all in all, the trim proved a very profitable one from a financial standpoint. We do not expect to make anything great from this line. Of course it pays a profit, but the main point in the whole business is that it brings in the people, and that is what counts in the small store as well as the larger ones. Then we must see to it that the general arrangement of the store will be such that the customer who has come primarily to buy valentines will be led to consider other inducements that we have to offer him.



SHOW-CARD WRITING.

Words of Encouragement for Those Who Have Not Yet Tried Their Hand at It—A Few Points About Lettering—Specimen Signs that Were Done in Colors by a Self-confessed Novice at the Work.

By W. E. PRICE, Ph.G.,
Toronto, S. D.

I have read with much interest the many articles published in the BULLETIN OF PHARMACY on show-cards and show-card writing. Personally I am an ardent believer in the efficacy of show-cards, as I am in all forms of advertising. I never fail to have show-cards displayed from every available point of vantage in my store.

I am one of the poor unfortunates who never had a lesson in drawing. Nor have I ever had any instruction of any kind in the printing or writing of show-cards. Furthermore, I am one of the nervously constituted persons who have not the patience to put much time or trouble in fussing about little things. Consequently I presume my work shows the lack of painstaking care. However, I make my cards attract attention, and that is what counts.

LETTERING IS NOT DIFFICULT.

My ordinary lettering is not prententious and represents something any one can do. When completed it is odd to the layman and really neat. I make a backhanded, downward stroke for each letter, ending with an upward jerk at the end. The first appearance of the word "letter" would look like Fig. 1. When completed it would represent Fig. 2.

By placing a dash of a contrasting color in the bottom angles between the letters, a nice

Fig. 1.

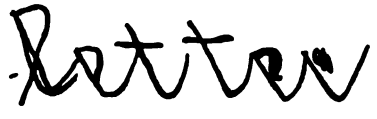
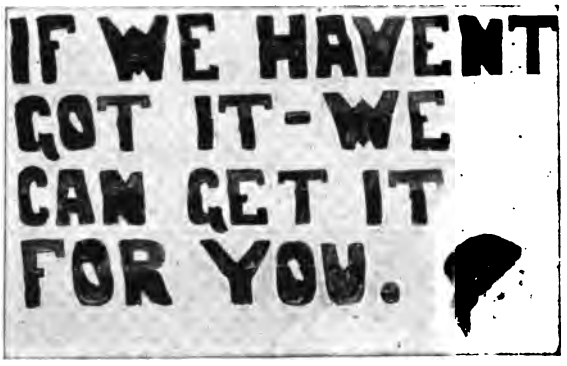


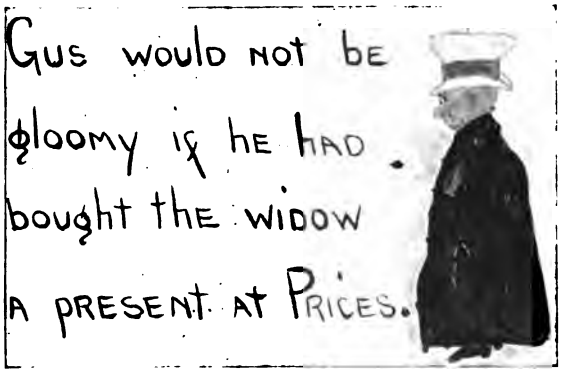
Fig. 2.

effect is obtained. This style of lettering can be done by any one with ten minutes' practice. It is surprising to see how neat and showy an effect can be obtained. I find, too, that by making block letters and using contrasting colors for the top and bottom halves of letters, a striking card can be made.

Again let me state I have never taken a



lesson in drawing and never until this year attempted this kind of work. I copied in freehand the large pictures of the comic supplement heroes—Hooligan, Gus, Hans and Fritz, etc., and colored the copies with show-card ink and water-colors. I will venture to



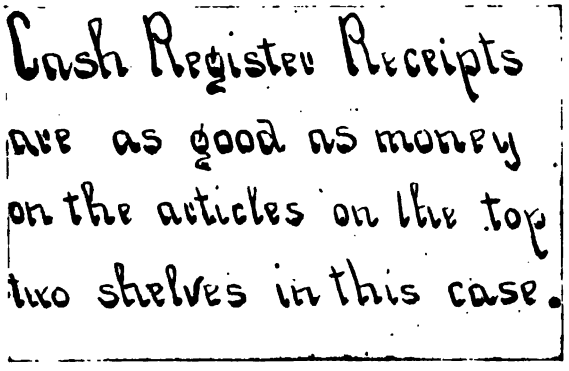
say there have not been a dozen people in my store who have not noticed, read, and spoken of these signs. Most of them inquire for the artist and refuse to believe that I am guilty. To one who never tried anything of the sort until this year, and did fourteen cards in

spare moments in two days without spoiling a piece of cardboard, it seems ridiculously easy indeed.

I am sending you an example of each kind of show-card that I make. If I, with my limitations, can make show-cards which pay, any one can.

SOME NOVEL CHRISTMAS ADVERTISING.

Another subject of interest on which I should like to see more articles is advertising. I venture to say I spend 50 per cent more on advertising than the largest general store in my town, and I have carefully classified the results. My trouble has been to get people to *read* what I have to say. This year in my Christmas letter to my patrons I placed a number in an inconspicuous place, made with my Bates machine, the duplicate of which I placed on a small piece of cardboard. On the outside of the envelope I had printed: "This envelope may contain a $2.50 gold piece.



Read every word. The National Bank will pay some one for the trouble."

I submit a copy of the letter. The banker drew the lucky number and paid the man who presented it. Two days before I mailed my letters, I posted streamers all over town, "Who's got the Lucky Number?" This attracted more attention to me, caused more stir and talk, and gave better results than any scheme I've ever tried. And the number being almost hidden required reading and search to find it.

Would not some letters from your subscribers on advertising in its various forms be interesting? I for one should be glad to read of others' experiences in that line, as I have carefully classified my advertising, and can answer in my own case, so far as one is able, what pays and what does not.

DOLLAR IDEAS

MARKING RECORDS OF PURCHASE ON THE GOODS.

J. F. Rupert: I notice in the September issue of the BULLETIN for 1911 an account of the sticker which Sherman & McConnell of Omaha place on packages, stating the contents, the amount, from whom purchased, the price, and similar data. A scheme I always use is to stamp every article with the date of invoice. Goods like tooth-brushes upon which it would be hard to write the date are placed in a box and the container marked with suitable data. This enables one to tell how old an article is, or at least how long it has been in the store. And on this information one is enabled to arrange his stock so as to dispose of old articles first, keeping his goods as fresh as possible.

While I always placed the name of firm from whom purchased on the original packages, boxes, crates, etc., I did not make such record on patents, for instance, purchased in broken dozen lots. In these cases the dates on the individual packages assisted in determining what firm was responsible when it was necessary to make claims for defective or deteriorated goods, as we must often do.

Some may object to stamping goods with a rubber date stamp for the reason that customers may get onto the scheme, but the following plan overcomes that objection:

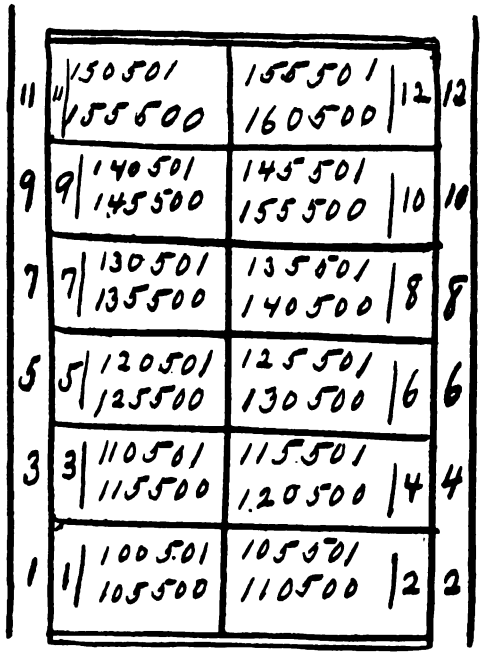
For January 1 or 5 or 20 mark as follows: 1x0111, 1x0511, 1x2011. For November or December 5 we may write 110511, 120511. No one can deciper this code. The last two figures indicate the year; the first two, the month. The second figure will be an "x" or other character for the reason that only the last three months have two figures in the number of the month. When the day of the month is less than two figures, the third figure of the date number should be an "0" or other character—January 5, 1911, 1x0511.

I think this ought to be clear. It will take slightly more time to date goods, and is of much value in conducting business. It is a little job for one of the junior clerks who will be on the job of checking goods and marking. Any ambitious clerk will take eagerly to such a scheme as this.

A METHOD FOR FILING PRESCRIPTIONS.

W. A. Brabrook, North Berkeley, Cal.: Here is a convenience I use in my prescription room. It will save time for those who use the box system for filing prescriptions.

On the face of each box appears, of course, the numbers of the prescriptions contained within. But in addition, I put a key number on the side of the box corresponding to the



number on the edge of the cabinet. So without studying the numbers to see where a certain box belongs, I simply put box No. 6, for instance, in the compartment marked No. 6.

In this way we discard the confusing numbers and locate the place simply by the key as shown in the rough illustration. Boxes are added from time to time to the top, so that the numbers naturally begin at the bottom.

CLEANING A PANE OF GLASS WITH WOOD ALCOHOL.

W. T. Beam, Moundsville, W. Va.: One evening while putting some tungsten electric globes in our windows, I noticed that the glass was very dirty from a deposit of grease, etc., caused by the gas we burn for both fuel and light in the store.

I immediately took the black cotton batting which is packed around the light, dampened it with wood alcohol, and with little effort cleaned and polished the glass, thus doing away with water and the dirt and trouble caused by them. As we must go over our store at least once a week and clean all glass, this makes the work about one-fourth as much as it is ordinarily.

A SAFE WAY TO DISTRIBUTE SAMPLES.

A. L. Remington, Silver Springs, N. Y.: Many towns have ordinances against the distribution of samples unless they are placed directly in the hands of an adult. In my town we cannot leave a sample where it can be picked up by a child. I use a special slip, attaching it to the sample with a rubber band:

> The village board does not allow samples to be distributed unless they are placed inside of the houses. This is our only excuse for calling you to the door to receive this sample. It has merit, and we hope that you will be so well pleased with its use that you will readily forgive us for any momentary annoyance we may have caused you.
>
> REMINGTON'S PHARMACY.

This allows me to distribute my samples of foot-powder, cold cream, etc., without violating the law or provoking the housewife.

A CONTAINER FOR SMALL STOCKS OF FLAXSEED MEAL.

W. G. Epplen, Omaha, Nebraska: Many stores buy only five or ten pounds of flaxseed meal at a time, and then have no good place to keep it. A container can be made by removing the top hoops of a ten-gallon Dickinson witch-hazel keg. Take the head out in one piece, replace the hoops, drive a nail through a No. 8 cork and into the center of the head of the keg. This serves as a handle. Put a large cork in the bung-hole, and you then have the best possible container for five or ten pounds of ground flaxseed meal. The meal retains all its oil, as the inside of the keg is coated with paraffin.

USING OLD CORKS.

Stewart T. McGee, South Berkeley, California: Money may be saved in corks by using the old ones over again, especially the large corks that come from emptied stock containers. In putting up an order, a large cork is

often needed. I mean corks from number 10 to 18, and the many sizes of flat ones; hence the necessity of keeping a stock on hand.

If you will keep a box for large corks instead of throwing them away, they can be made like new in this way: Rinse them, put a piece of paraffin-paper beneath, and rub the top over a piece of No. ½ sandpaper. The sandpaper takes off the dark, dirty layer, leaving a bright new surface, while the paraffin-paper gives the rest of the cork a perfectly sanitary and at the same time neat looking covering.

TO WASH SHOW-CASES.

D. v. Riesen, Ph.G., Marysville, Kansas: The washing of show-cases, especially the floor-case, usually requires a lot of time, particularly the inside glass. This work can be done easily by employing the common rubber window mop. Do not be afraid to use plenty of good water with a little ammonia, and then proceed as though washing a large window. In a little while one will, with a little care, be able to save a lot of hard work, and what is often more valuable, time. I have used this method for several years and find that it works to perfection. I would not think of going back to the old way.

A GOOD CLEANING CLOTH.

O. N. Sprague, Pawnee, Ill.: Get a yard of cheese-cloth, moisten it with benzine or gasoline, and use it as a dust-rag and polisher on glass, nickel, and woodwork. The labor saved and the polish obtained are surprising. This rag makes the whole store look like new. Use it once each day, or when needed, and you will cover a multitude of sins.

Some Stomachs Have This.—

An amylase has been separated from pancreatin which will digest 400,000 times its weight of starch in forty-eight hours, or form 6000 times its weight of maltose in twenty minutes. It was prepared by extracting the pancreatin with 50-per-cent alcohol, precipitating with absolute alcohol and dialyzing.

Rhubarb.—

Tutin and Clewer say that rhubarb contains rhein, emodin, aloe-emodin, rheinolic acid, and a non-glucosidic resin, and that the chief purgative principle is the non-glucosidic resin. Aloe-emodin and chrysophanic acid have purgative properties, but the other constituents are physiologically inert.

SELECTIONS

OPPORTUNITY LOST.

The biggest mistake that the average retail druggist makes in his effort to increase his business is due to the fact that he absolutely fails to tie his store, in any noticeable way, to the well-placed advertising that every moment of every day is informing hundreds of his "could-be" customers of the many good points in favor of the good things that line his shelves.

Why not put your ear to the ground and heed the rumbling of the business that is being generated by the tremendous amount of money that is spent on advertising, the electric spark of the business world, the thing that molds public opinion? The force of that advertising is greater than we can readily grasp, and still the average retailer goes along trying to be happy and successful on thirty cents' worth of business; when a bigger trade is within his grasp, if he will only adjust his harness and drive out of the rut.

Why not, as a beginning, take the pages of the magazines and the daily newspapers, containing the advertisements of the articles already on the shelf, and paste them attractively in your window, with an appropriate catch line, indicating that you have the very latest fad or fancy within easy reach? Even passing attention to details of this kind would soon show results, and to persistently employ such tactics, changing them as conditions warrant, would certainly work wonders in the shape of good business the effort would create. Try this suggestion for thirty days, and do it enthusiastically, and you will hear the constant tinkle of the cash drawer, and the answer will always be "ready money!"

It would be a mighty hard matter to compile figures that would even approximate the total amount of money that is being spent by reliable manufacturing concerns to establish a better understanding of their goods in the minds of the buying public; but for argument's sake, it no doubt will be granted that it is a mighty big pile. It will be readily granted, too, that the business-producing force of this persistent advertising is something that must be reckoned with, and not just merely passed by for the want of a personal reason to investigate. If

the average merchant will take ten minutes by the clock to reason out the excuse for this advertising, what it has done in building up so many concerns, he will be apt to realize that to tie even a decimal part of those well-thought-out business announcements to his individual store would not be a half bad move, after all.

Take the newspapers and magazines, as they all come out from day to day and month to month, study the advertising pages carefully, get the reason, get the gist of things that you are bound to have calls for. Write the manufacturer who pays the bills for more information; ask for his selling plans, even if you do not contemplate buying; ask for those well made cuts that you may use in your own local advertising. Question the manufacturer from your point of view, from your knowledge of local conditions, get posted, cultivate a bit of optimism, and then apply one-tenth of what you gain to your own business. In other words, just harness your store to the other fellow's noise while he is paying the bills, and profit by the degree of ingenuity that you employ from time to time.—W. C. D'ARCY in the *Practical Druggist.*

LIGHT CIGARS NOT THE MILDEST.

Probably there is not one smoker in a thousand who is not surprised and, in fact, incredulous when he is told that the color of a cigar is absolutely no guide to its strength. Yet such is the case, and a fact well known to cigar manufacturers and importers. The belief of smokers that cigars of dark color are strong and those of a lighter shade are milder, is, in point of fact, as fallacious as it is general. This is but one of many delusions harbored by consumers of tobacco, and which practical cigar men smiled at and indulged from time immemorial.

But of recent years the inclination of smokers toward light-hued cigars has assumed the proportions of a "craze," and the producers are finding much difficulty in meeting the demand. The manufacturers and Cuban tobacco raisers would now gladly correct the error; but after having carefully classified their products under the style of claros, colorados, maduros, etc., for decades, they find it next to impossible to dispel the delusion.

A maker of Havana cigars uses but one grade or blend of tobacco in the body or filler of his cigars. Exactly the same stock is used in his Conchas as in his Perfectos; in his claros as in his maduros. After the cigars are made, however, his "selector" takes them in hand and classifies them according to the relative shades of the wrappers. This is done to effect a uniformity in the appearance of each box of cigars, and to enable the dealer to readily indulge the whims of the self-deluded smoker.

Inasmuch as the wrapper constitutes not more than one-tenth of the cigar, it will readily be seen that the degree of its strength or mildness is very inconsiderable in effect. In this connection, however, it is interesting to note that tobacco tradesmen versed in the intricacies of the industry rigidly bar the light-colored wrapper from their own smoking tables, knowing that it generally indicates that the leaf was prematurely cut and improperly cured, and that it impairs the flavor and burn of the cigar. Cubans, who, by the way, are notably partial to mild tobacco, avoid smoking light-colored cigars just as they avoid eating a green orange or an unripe banana.

The prejudice of these natives and of tobacco tradesmen is a logical one, and serves to throw into bold relief a peculiar misconception of facts which is both amusing and embarrassing to venders of the fragrant weed.

Whether cigar smokers will ever awaken to the fact that a dark cigar is, if anything, milder and invariably sweeter and more aromatic than a light cigar, remains to be seen.—*Detroit Free Press.*

AN EXPERIMENT IN SUNDAY CLOSING.

Our much revered friend and co-worker, the late Brother Redsecker, presented a paper along this line before the association some years ago, and prefaced his essay with one of his characteristic aphorisms as follows: "To the avaricious druggist whose sole aim in life is mere money-getting, any remarks which I may make will be like pouring water on a duck's back." Viewed from a moral aspect, this sums up the whole problem in a nutshell. Greed, avarice, and the love for mammon, these are the dominating elements which unfortunately characterize the sole object of many a pharmacist's life.

At this point allow me to present to you a few facts within my own experience for your consideration. Although still a comparatively young man, I have spent upwards of a score of years in a drug store. They have been

years rich in experience and profit, both mental and material, and I am proud and glad indeed that my lot has been cast in such a noble calling. Having labored for many years and being still unable to enlist the interest and co-operation of my brother pharmacists in the Sunday closing scheme, I finally resolved to break away from the old régime and close my own pharmacy at least a portion of each Sabbath Day.

To that end I notified each physician in our city, in a carefully worded letter, of my intentions, giving my reasons for so doing, etc. Much to my surprise they were almost unanimous in their commendation for my action and not a few congratulated me most heartily for taking the initiative. Thus my first and most important step had proven entirely successful. As for my patrons' attitude in the matter, instead of complaints from customers, as was expected, I received many earnest words of encouragement. Some of my best customers openly indorsed my action and the clergy of the city passed a resolution commending me for my worthy and most excellent example. At the beginning some doubt was expressed lest it might seriously impair the success of my business. The result of the Sunday closing was also most gratifying, and after three years' experience with the plan my total sales have increased each year.

My candid opinion of this whole plan of Sunday closing is that to most pharmacists the objections, if any, are largely either imaginary or are actuated by motives of jealousy and selfishness. The real need for open drug stores on Sunday is very little indeed, as you all will agree when you recall the comparative number of sales usually made of drugs and medicines which are absolutely necessary and which could not have been purchased previously. In short, I am convinced this matter of keeping open shop is largely one of habit. And I should be happy indeed if through our grand old Pennsylvania Pharmaceutical Association, which has always stood for the highest and best in our calling, pharmacists could be so inspired with zeal in this new movement for the advancement and uplifting of our profession as to make of them better pharmacists, better men, and respected citizens.—P. HENRY UTECH in the proceedings of the Pennsylvania Pharmaceutical Association.

THE HISTORY OF THE CALABASH PIPE.

If you own a calabash pipe, you have reveled in its light weight, graceful shape, and unusual smoking qualities, and yet you probably do not realize that your owning a calabash is due to the cleverness of an English soldier, and that the article you prize for its rich color and fragrance is an own cousin to the cucumber, the melon, and the squash—a gourd of the family *Lagenaria vulgaris*.

A British soldier, so the story goes, had broken his pet brier, and all that remained of it was the hard rubber mouthpiece. While crossing a field one day he stepped on a calabash gourd, which the South African natives feed when green to cattle, and noticed that the crook of the stem resembled his pipe. Picking the gourd he cleaned out the inside, fitted his mouthpiece to it, and the first calabash pipe was born. The gourd was green and did not burn out, and it did color beautifully; so when the Boer War was over, Tommy Atkins returned to England with his pipe and a number of gourds.

But the dried gourds burned out, and it was necessary to line them. Zinc was first tried and proved unsatisfactory, and then meerschaum and the compressed meerschaum substitute were employed, as they are to-day.

The calabash gourd can be grown in the United States, but as care must be used in shaping the neck or stem while it is growing it will never be largely cultivated here, as this work can be far more cheaply done in Africa. In fact, the best gourds come from the country along the edge of the Karoo Desert in South Africa, where a temperature of 120° in the shade is not at all unusual. The vines grow in a sandy soil and flourish like the bay tree of the Scriptures, sometimes yielding 50 gourds to a vine, but their cultivation is by no means easy—for pipe purposes—as the surface of the gourd is easily bruised or scratched, and the plant is beset by insect foes and worms.

The gourds when ripe are picked, all the imperfect ones thrown out, and then the stem of the calabash cut off at about the proper length for a pipe. The pulp is carefully removed, and the outside skin scraped off, and then the gourds are boiled and cleaned in huge vats. This cleansing is repeated several times, after which the gourds are placed on large trays and set out in the sun to dry thoroughly. This, too, is an operation that must be con-

ducted with great care, as extremes in temperature crack or distort the bowls and render them unfit for use.

The manufacturers first polish the surface to the rich golden color so prized by smokers, and extreme care must be taken not to scratch the bowls. Then the bowl is mounted, with amber, rubber or composition, depending on the quality of the bowl, and the fitting, either a loose cup bowl or one set flush, is placed in position. The result is a pipe of pleasing lines, of good smoking quality, of extreme lightness, and an ability to color like to that of the meerschaum, but without the disadvantages and liability to "burn" of a meerschaum. —*Pharmaceutical Era.*

WHAT DRUGGISTS SHOULD NOT TAKE BACK.

The druggist should take back any bottles of once liquid corn cure which has solidified, and any porous plasters which will not stick for the big show.

He should take back gum wrappers and give prizes for them. He should also take the cash at night and put it in the safe. He should take back any unkind words spoken to a traveling man, and things he did not order from the wholesale house.

But he should not take any "back talk" or take back any full bottles of malted milk. He should not take back a single nipple which has been used, much less a pair of outgrown rubber gloves. He should not take back postage stamps with the gum licked off, nor should he take back things he says which are the truth.

He should not take back a derby hat to his next-door haberdasher, unless he can prove that it did not get broken in a fight. He should not take back a quarter, when he can just as well get a half.

He should not take back the rock-candy bottle and come out with a rye face. He should not take back a hot-water bottle unless he has cold feet. He should not take back any sponges, for fear of being soaked.

He should not take back any mirrors, for they cast reflections. He should not take back a safety razor, even though his customer has had a close shave with it. He should not take back any hair tonic, for he might get "bald up."

He should not take back any hoarse remedies, such as throat gargle, zymole trokeys, or horehound candy, lest he be made to cough up. He should not take back any vaselin or greasy article if he can slip out of it.

He should not take back any dice boxes or playing cards or poker chips, as they are only a gamble. He should not take back any opened bottles of glue, lest he should get "stuck" on it later. He should not take back any stale toilet waters or perfumes, for there is not a "scent" in them.

He should not take back any gauze or cotton bandages unless he is wrapped up in his business.

It has indeed been a pleasure to tell "What a Druggist Should Not Take Back," but here is a customer who wants to bring back a pair of electropodes. She says, " 'Pon my 'sole,' they did me no good."—From CHARLES J. SACKSTEDER'S paper before the Wisconsin Pharmaceutical Association.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

WINDOW DISPLAYS AT SPECIAL TIMES.

To the Editors:

The articles and illustrations on window trimming in the BULLETIN have interested us. Having gleaned some very good ideas from

The Red Cross Drug Store. Bartlesville, Oklahoma, W. B. Campbell, proprietor.

them, we would like to express our own views on the subject.

We arrange our windows to conform with our newspaper advertising, trying for the

most part to feature one line of goods at a time, so as to impress the fact that we carry quantity as well as quality.

Changing the trims every week regularly is another custom of ours which we adhere to strictly. Special trims now and then, also holiday exhibits, are of great value in that they create a curiosity, which attracts the attention of the public to the goods displayed. Of the two window trims we offer for inspec-

A Thanksgiving window in the Red Cross Drug Store.

tion, the Thanksgiving display was the easiest to put in. It was given unsolicited newspaper comment, and we received many compliments on the idea, incidentally selling a good deal of box candy.

OUR CHRISTMAS DISPLAY.

The Christmas trim which occupied the window is another original idea of ours, displaying our specialties in Christmas presents. The

A Christmas window display in Mr. Campbell's store.

background in each case is hand-painted in oil color, on canvas, the work of our trimmer.

The fixtures used are of great advantage, bringing the goods up from the floor of the window into plain view of the passer-by. The stands do away with the necessity of building up a surface with boxes to answer the purpose, and much more space can be covered with better results.

When the week has elapsed the goods in the window are displayed inside the store, where the shopper is again reminded of them. The picture of the store will show the space we have to carry out this plan, though, were the room smaller, we would manage in some way, for the system works wonders.

THE SHOW-CARDS.

Show-cards are needed in a window just as much as your name, and the name of your business, is necessary on the front of your store. We never start to change a window before deciding on the nature of the new display. After that is settled the cards are written.

The wording on all of our cards is as concise and pointed as is possible to convey the meaning intended. Often we use slang phrases, bright sayings referring to the goods on display. Many of these expressions being funny are taken up by our customers and repeated to our benefit. For such publicity is free. The use of the cards is by no means over at the end of the week as in the case of the goods. They do good, steady work as silent salesmen distributed throughout the store.

EDWARD TOWN,

Window trimmer in Campbell's Red Cross Drug Store.
Bartlesville, Okla.

AN AMERICAN PHARMACIST WATCHING THE REVOLUTION IN CHINA.

To the Editors:

I am sending you some pamphlets in Chinese on disinfection. These articles deal especially with prevention of plague, and while partly sent out as an advertisement they deal largely with sanitary matters. This all goes to show the interest taken in these things among the Chinese. China is awakening to modern ideas, and rapid progress may be expected during the next twenty-five years. The present revolution reveals the dissatisfaction of the people with conditions as they now exist, and no matter how the revolution eventuates, the result will be a more modern China. As I write I can hear the boom of guns, and by looking out of the port I can see the flash of the rival batteries on opposite sides of the Yangtse River at Hankow exchanging compli-

ments. The revolution has spread throughout the entire valley. The rebels hold everything for a stretch of over 1000 miles with the exception of Nanking, 200 miles up the river. This port may have fallen by this time.

J. F. RUPERT, U. S. Navy.

U. S. S. Helena, Asiatic Station.

HE OBJECTS TO SOME OF THE N. F. FORMULAS.

To the Editors:

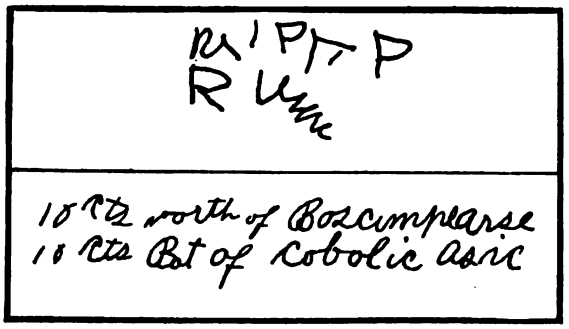
I notice in your article in the December number, "Comment on the New N. F. Formulas," that the N. F. Committee asks for criticisms. My criticism on the formulas published in your journal is that we have far too many formulas for vehicles now, without complicating matters and still further loading druggists' shelves. Elixir Aromatic, U. S. P., and Elixir Lactated Pepsin are both so widely used as vehicles that with the others which we already have in the National Formulary I think we have plenty. If a physician wants something special, let him order it. We don't need any more. WALTER F. MEYER.

Colorado City, Colo.

A PRIZE WINNER!

To the Editors:

I am enclosing two orders which I received recently and which I hope you will find worthy of reproduction in the BULLETIN. One is easily deciphered, while the other is a regular Chinese puzzle, pure and simple. Fortunately, there happened to be a telephone



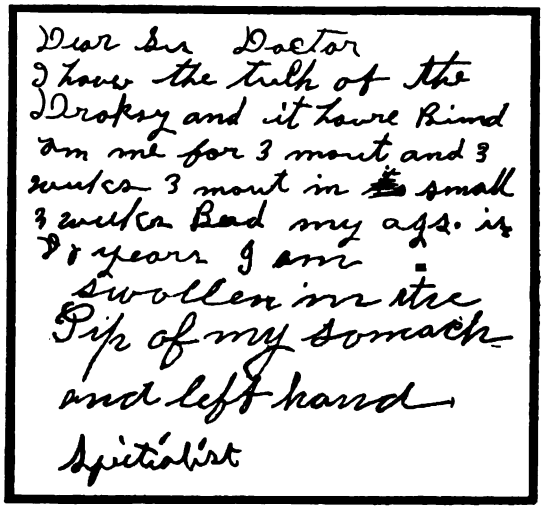
close to the customer who sent the latter in, and I found out by inquiry that blue ointment was desired! Now if any one can contribute a more difficult specimen than this, the treats are on me! G. S. STOVALL.

Lake, Miss.

SOMEWHAT SWOLLEN UP.

To the Editors:

We have just received a unique request from a customer. Thinking it might be of some interest to other readers of the BULLETIN I am submitting it for publication if you have



the space to spare. I may add that I am always overanxious for the BULLETIN to come each month. I can't get along without it!

Corinth, Miss. H. E. WALKER DRUG CO.

THE DIFFERENCE.

To the Editors:

The thought may be old, and again it may be new to you, regarding the wide difference in the effect of medicine due to its method of administration — whether applied internally, hypodermically, or otherwise. Give a dog 30 drops of turpentine and he'll pass a ten-yard tapeworm. Give him the same thing as an enema and he'll pull a six-cylinder motor at the speed limit! W. BODEMANN.

Chicago.

A WISE NEW YEAR'S RESOLVE!

To the Editors:

I am going to start the New Year right by making an investment in the best drug magazine published! You can put me down as a warm friend of the BULLETIN.

Laurel, Miss. R. H. SCRUGGS.

To the Editors:

The BULLETIN OF PHARMACY is my refrigerator in summer and my hot-water bag in winter. E. JENSEN.

England.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Bid for Business.—

J. S. Gleghorn, of Waynesburg, Pa., distributes a store paper. The make-up and style resemble that of

WHEN WE STARTED

When we started the Quality Drug Store a little over a year ago, people were in the habit of buying their drug-store goods some other place. Now they are in the habit of buying them here. We make it profitable for them to do so; we have convinced them that there is an all-round saving at

THE QUALITY DRUG STORE

We save you more by making our terms net cash.
When you buy on time you really borrow money—the merchants' money—and he charges you interest on it. That interest charge is figured in with the price and you don't see it. But it is there all the same—and YOU PAY IT. WE SAVE YOU THAT. And as we have no bad bills you don't have to donate anything to offset those.
Why not let us help you to these substantial savings? We are ever on the alert; we aim to keep up the high standard of our store in every respect. We have every facility and advantage for making this store the place to buy everything in the drug line. Ours is a modern pharmacy, with modern methods of doing business.
Phone us and we'll deliver any purchase. Send the children, we treat them exactly as we would you.

Gleghorn's Quality Drug Store,
"The Nyal Store"
111 West High Street,
Waynesburg, Pa.

the *Saturday Evening Post*. On the back cover Mr. Gleghorn runs an ad. in which he advances reasons why the reader should patronize his store.

Advertising in Theater Programmes.—

Messrs. Wilkinson & Co. of Keokuk, Ia., had an ad. in the theater programme of the Grand Opera House of that city. It was of a character intended to appeal to the people who attend the theater, and will be found

Bright Eyes, Rosy Cheeks, Pearly Teeth, Peachy Skin. Attractive Manicured Hands are dependent upon correct toilet accessories. Our stock of these articles is so large and so varied that you will find here just the right thing for your particular needs. Order by phone and we shall send an assortment for your selection. We deliver anything, anywhere, any time.

WILKINSON & CO.
Keokuk's Biggest, Busiest, and Best Drug Store,
422 Main Street

suggestive to other druggists who employ this medium of advertising. The caption, it will be noticed, is a play on the name of the show, as the performance was known as "Bright Eyes," a musical production.

Another Full-page Ad.—

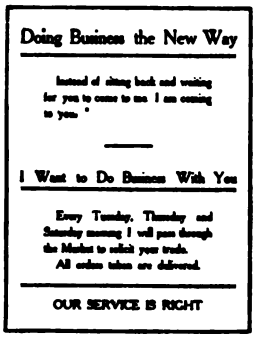
The State of Illinois seems to be conspicuous for the number of druggists who run full-page newspaper ads. In an edition of the *Illinois State Register* now before us appear two such large insertions. Both are from

pharmacists, one inserted by Claypool's Drug Store, the other by Mitchell's.

The Claypool ad. seen in the illustration shows the general character of the large ads. They are well arranged, being divided into sections, each one of which is surrounded by a line border.

Canvassing the Market Place.—

Clarke F. Hess of Norristown, Pa., is not letting any business get away from him if he can help it. Not long ago he distributed a little folder among the farmers and merchants who have stalls in the market place. Here are the two inside pages:

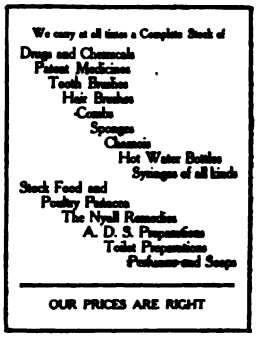

Doing Business the New Way

Instead of sitting back and waiting for you to come to me I am coming to you.

I Want to Do Business With You

Every Tuesday, Thursday and Saturday morning I will pass through the Market to solicit your trade. All orders taken are delivered.

OUR SERVICE IS RIGHT


We carry at all times a Complete Stock of
Drugs and Chemicals
Patent Medicines
Tooth Brushes
Hair Brushes
Combs
Sponges
Chamois
Hot Water Bottles
Syringes of all kinds
Stock Food and
Poultry Poisons
The Nyall Remedies
A. D. S. Preparations
Toilet Preparations
Perfumes and Soaps

OUR PRICES ARE RIGHT

The paper was a thin chocolate-colored stock, the type a darker shade of the same color.

Mr. Hess says that by canvassing the market he secured some good business. Others might try the scheme.

PRACTICAL PHARMACY

Some Proposed N. F. Formulas.—

Here are some more of the formulas proposed for introduction into the next edition of the National Formulary:

MISTURA FERRI SALICYLATA.

(Salicylated Mixture of Iron. Cohen's Salicylated Iron Mixture.)

Sodium salicylate	125. Gm.
Tincture of ferric chloride	125. Cc.
Ammonium carbonate	6.5 Gm.
Citric acid	14. Gm.
Oil of betula	4. Cc.
Glycerin	175. Cc.
Distilled water, a sufficient quantity to make	1000. Cc.

Dissolve the citric acid in 200 Cc. distilled water, add the ammonium carbonate, and then dissolve the sodium salicylate in this solution, add the tincture of ferric chloride, glycerin, and the oil of betula, mix, and then add sufficient distilled water to make 1000 Cc. and filter.

GARGARISMA GUAIACI COMPOSITA.

(Compound Gargle of Guaiac. Cohen's Guaiac Gargle.)

Ammoniated tincture of guaiac	100. Cc.
Compound tincture of cinchona	100. Cc.
Clarified honey	200. Cc.
Potassium chlorate	40. Gm.
Oil of peppermint	2. Cc.
Distilled water, a sufficient quantity to make	1000. Cc.

Place the clarified honey in a bottle graduated to 1000 Cc., then gradually add the mixture of the oil of peppermint and the tinctures, shaking after each addition. Then add in divided portions with continuous shaking the solution of the potassium chlorate in 500 Cc. of warm distilled water; then add sufficient distilled water to make the mixture measure 1000 Cc.

NEBULA MENTHOLIS.

(Menthol Spray.)

Menthol	2 Gm.
Liquid petrolatum, a sufficient quantity to make	100 Cc.

Dissolve the menthol in the liquid petrolatum by agitation in a stoppered bottle.

NEBULA MENTHOLIS COMPOSITA.

(Compound Menthol Spray.)

Menthol	1. Gm.
Camphor	1. Gm.
Oil of betula	.5 Cc.
Eucalyptol	.2 Cc.
Oil of cinnamon	.2 Cc.
Liquid petrolatum, a sufficient quantity to make	100. Cc.

Agitate the ingredients in a stoppered bottle until solution is obtained, then filter if necesary.

PASTA RESORCINOLIS FORTIOR, LASSAR.

(Lassar's Stronger Resorcin Paste.)

Resorcinol	20 Gm.
Zinc oxide	20 Gm.
Starch	20 Gm.
Liquid petrolatum	40 Gm.

Thoroughly triturate the zinc oxide with sufficient of the liquid petrolatum to make a thin, smooth paste. Reduce the resorcin to a very fine powder, mix it with the starch, and add the mixture to the zinc oxide paste and triturate till a uniform smooth mixture is obtained, gradually adding the remainder of the liquid petrolatum and thoroughly incorporating the mixture.

The Effect of Heat on Basham's Mixture.—

F. W. Nitardy of Denver, Colorado, does not believe in attributing trouble with Basham's mixture to the quality of the materials used. Writing in *N. A. R. D. Notes*, he says the temperature may be the cause of the difficulty.

Mr. Nitardy says he has never noticed any mention of the temperature at which this preparation has been kept when it was found to be "off," in spite of the fact that ordinary warm summer weather is sufficient to precipitate the best and most carefully prepared sample.

Ferric acetate is unstable at temperatures that approach summer heat, but that fact is not generally known.

If one will take a sample of strictly U. S. P. Basham's mixture, divide it into two portions, keep one in a fairly warm place and the other on ice, he will find that the former portion will precipitate in from one to three days, while the portion on ice will be in perfect condition in six months.

Mr. Nitardy has tried it. He did that two years ago and since has not experienced any trouble with the preparation. He used about two gallons a week, which ought to be a fair test.

Mr. Nitardy believed that if druggists generally would bear this in mind it would save them much trouble and money in the course of their business.

BOOKS

How to Make Show-cards.

We have just perused a new book entitled "How to Make Show Cards," and are very favorably impressed with it. It is a practical treatise on the fundamental principles of letter-making with pen and brush. Any pharmacist will find this work useful. The author is Charles A. Miller, Associate Editor of *The Spatula*. Mr. Miller aims to be practical. He has written the book primarily for the clerk or proprietor in active business. He gives concisely the essential principles of sign letter-making, and demonstrates how easily a person of ordinary ability may acquire a facility in making attractive card signs for counters and show windows. The subject is so well covered that any one who conscientiously follows the text will make progress in the work. The book is printed on heavy coated stock, is illustrated, and is bound in paper. A number of sample alphabets and signs are included, and in the last chapter are some "catch phrases" that may be used as legends on window cards. The price is $1.00 post-paid. The publishers are The Spatula Publishing Co., of Boston, Mass.

Merck's Annual Report.

A most informing book on recent advances in pharmaceutical chemistry and therapeutics is E. Merck's Annual Report. We have just had the pleasure of reading the last issue. The bulk of the volume is devoted as usual to abstracts from the world's medical literature. Among other things, reference is made to the most important publications on the Ehrlich-Hata preparation, Salvarsan, the subject of so many papers during the year.

The introductory chapter treats of "The Cacodylates and Their Therapeutic Uses." It represents a compilation of what the clinicians and research workers have had to say on this important subject. Then follows an article on "Kefir," a ferment used by the Caucasians in the making of kumiss, a preparation which was shrouded in mystery for a long time. And so the book

continues dealing not only with medicines of recent origin but setting forth also the newly discovered properties of old medicaments.

A Guide in Plant Chemistry.

The School of Pharmacy of the University of Wisconsin has published a brochure entitled "Plant Chemistry for Pharmacy Students." It is not a text-book or laboratory manual, but is a guide intended for both instructors and students. It outlines the work in a manner which will make it of interest to others taking up this branch of study, and we are authorized to say that a few copies are available at the cost price of 35 cents each. They may be had upon application to the Secretary of the Board of Regents, University of Wisconsin, Madison, Wisconsin.

CAPSULES OF SCIENCE

Prepared by Prof. W. L. Scoville.

Idle Items.—

Non-crystalline boron is produced which is almost as hard as diamond, and is used for bearings, pivots, etc.

Most soaps will sink in water, but Dr. Cornish has shown that practically all soap solutions are lighter than water.

Lime is soluble to the extent of 6.07 per cent of calcium hydroxide in a 20-per-cent sugar solution, and to 1.34 per cent in a 35-per-cent solution of glycerin.

Norway has $15,000,000 invested in the manufacture of air-nitrates. In the United States but one factory is in operation, at Niagara Falls, but another is being built in Tennessee.

Sea-water contains about 2 per cent of chlorine, which cannot be accounted for by dissolved substances from the land. It is thought that volcanoes account best for it.

Ultraviolet light rays greatly reduce the power of the digestive and other ferments. Sunlight has, therefore, a distinctive action on solutions of these ferments.

Six turns of an aluminum coil in a condenser are said to be equal in cooling power to ten turns of a glass coil of equal diameter.

A crystalline deposit in a sample of fluidextract of cinchona was, in one case, found to consist almost entirely of calcium quinate.

Cardamom oil is poisonous! But not the volatile oil from *Elettaria repens*, but a fixed oil from the seeds of Hydnocarpus or Maratti. The latter has been used in oleomargarine under the name of cardamom oil, and has produced unpleasant results.

Selenium cells are being used for burglar and fire alarms. Light from a lantern or fire striking the cell closes a circuit and rings an alarm.

Platinum is quoted at about twice the price of gold. The demand is increasing and the supply is decreasing.

A French chemist says that saturated solution of boric acid affects the digestive power of trypsin or pepsin but slightly, and that a weak solution increased their power.

A Russian chemist says that nicotine is the most injurious to spermatozoa of all the alkaloids and toxins. Is the cigar responsible for "race suicide"?

A French chemist propounds the theory that the particles of comets' tails give out emanations which cause changes in atmospheric conditions, and he supports the theory strongly.

O. Piloty has proved that the iron in blood is all in the ferric condition, and is a ferric compound of hematoporphyrin.

After the injection of salvarsan ("606") arsenic is found in the urine for about three weeks, and it remains in the organs for months.

Cocoanut oil is being used in Europe to adulterate milk, skim milk being used to emulsify it and the fat-content brought up thereby.

Tomato oil is a new economic product. Instead of throwing away the seeds, which contain 18 to 20 per cent of oil, the canners are beginning to extract the oil. It is a drying oil, and may be employed in paints.

Books are disinfected satisfactorily by immersing in a 2-per-cent solution of phenol in gasoline for twenty minutes, then dried. The books are not injured by this treatment.

Artificial horsehair is now made by digesting cocoanut fiber in 15-per-cent sodium hydroxide at a temperature of 110° C., then washing. The fiber not softened by the hot alkali makes a good substitute for horsehair. (Oh, you automobile!)

When a body becomes luminous, not every particle emits light, but only some abnormal molecules. These molecules are supposed to consist of distinct varieties of matter. So says Prof. J. J. Thomson.

Calomel is acted upon by antipyrin to form mercury, mercurous oxide, and corrosive sublimate, and antipyrin hydrochloride. Such a combination is likely to produce salivation or even poisoning.

An Australian physician states most emphatically that pepsin in combination with alkalies is certainly active in the stomach, whatever it may be in the test-tube. He believes thoroughly in giving alkalies with pepsin from clinical results.

Dr. H. C. Bastian insists that living matter may come into existence spontaneously. He heated mixtures of sodium silicate and ferric nitrate in sealed tubes to 125° C. for five to ten minutes, at which temperature germs are destroyed, and then found living bacteria, yeasts, and molds were slowly formed in the solutions.

Another Blade of Grass.—

Eucalyptus oils containing phellandrene have been tabooed by the Pharmacopœia, but the copper miners have discovered that such oils will extract copper very economically, and the demand for them has suddenly increased. Four pounds of oil is used per ton of ore; the copper is collected by the phellandrene and floats on the surface. The oil can be recovered by distillation.

In Anemia.—

Dr. Wiggers finds that drugs which act on the heart do not have the same action in anemic conditions

that they do in normal conditions. Thus anemia prevents the slowing action of adrenalin, and also of digitalis, ergot loses its pressure-raising action, morphine is more likely to be fatal, and nitroglycerin does not increase the heart action as well.

In Glass, Too?—

H. Cohn thinks that hydrofluoric acid is thus far the best preservative of fruit juices. Alcohol cannot be boiled out successfully, hydrogen peroxide affects the taste and aroma, and salicylic and benzoic acids are prohibited. Hydrofluoric acid preserves the juice, and can be entirely removed from it, before use, by precipitation with calcium carbonate.

Told You So!—

Old-fashioned "superstitious" folks used to find water in a new country by means of the divining-rod, which pointed downward spontaneously when water was to be found. The new-fashioned "scientific" seeker may use a "phonendoscope," which detects the sound of running water so delicately that a stream 400 feet below the surface has been located by it.

Corking Chemistry.—

M. V. Schmidt says that cork is an insoluble mixture of anhydrides and esters of aliphatic acids, chief of which are suberic and phellonic acids. By impregnating sawdust or filter-paper with a mixture of the crude acids and heating to 140° C., an artificial cork is produced which has all the properties of natural cork except its physical structure.

Water Change!—

If the fat-splitting enzyme of castor seeds be mixed with oil and water in the proportion of 6 parts of enzyme to 100 of oil and 40 of water, the oil is almost entirely split up into glycerin and fatty acid. But if glycerin, fatty acid, and enzyme be mixed without water, a neutral oil is produced, the enzyme acting in just the reverse way.

High-drogen.—

The dirigible balloon has developed some ingenious schemes for producing cheap and convenient hydrogen gas. A French inventor finds that metallic calcium can combine with hydrogen to form calcium hydride, and this decomposes in water, yielding hydrogen gas and calcium hydroxide. This is proposed as a portable form of hydrogen.

Spirit of Nitrous Ether.—

Since spirit of nitrous ether cannot be made to hold its strength, D. B. Dott recommends that an alcoholic solution of lactic acid be mixed with a solution of sodium nitrite in molecular proportions, thus forming spirit of nitrous ether extemporaneously. The lactic and nitrite solutions are permanent.

Ferments Meant for What?—

How do enzymes act? Some say as catalysts, but Professor MacLeod points out that enzymes cause, not merely accelerate, certain definite reactions, and that when inoculated into animals they cause certain antiferments to appear in the blood. He thinks that enzymes are more than catalysts.

Bleachers for the Washerwomen.—

Sodium perborate as an ingredient of laundry soaps is increasing in use. On treatment with hot water it is decomposed into hydrogen peroxide, which acts as a bleaching agent, sodium hydroxide, and borax, which act as detergents. Several such soaps are in the market under special proprietary names.

Digitalis Preparations.—

Dr. Worth Hale says that the greater the proportion of alcohol in preparations of digitalis, the less is the deterioration by age. He found some fluidextracts and tinctures that maintained a high degree of potency for eight years. A fluidglycerate was less than half as strong as a fluidextract.

Hair-again?—Not Me!—

Thallium acetate is stated to produce baldness without fail when taken internally. Now if somebody can produce a physiological antidote to thallium it's hair-rah and a fortune for him.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Reciprocity Between Boards of Pharmacy.

S. C. R.—The boards of pharmacy of the following States accept one another's certificates under certain restrictions: Alabama, Arkansas, Arizona, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Missouri, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Kansas.

The general rule is that each candidate must secure from the board which registered him a national blank, properly filled out by the board, and showing him to have taken the required examination and passed with an average rating of not less than 75 per cent, and not less than 60 per cent in any one branch. This blank or certificate he must then present to the board in that State where he now desires registration on the exchange plan. In addition to this general requirement, however, many of the boards have special requirements of their own. Thus in some States a certain amount of preliminary general education is demanded. In this State, for instance, the pharmacy act compels two years of high-school work or their equivalent. In some States, too, recommendations from reputable citizens, and the like, are required.

Furthermore, no State board in the list given above

is compelled to accept the certificate of another board in any particular instance. The whole scheme is voluntary—not compulsory. Each reciprocating board is free to settle every individual case upon its own merits, and some boards require an applicant to appear before them in person. The fee for registration on the exchange basis varies in different States from $5.00 to $25.00.

The best thing for you to do is to write the secretary of the board of that particular State where you desire registration. He will tell you just what the conditions are, and under just what terms, if any, the board will accept your certificate in lieu of an examination. A full list of the secretaries of the different boards of pharmacy throughout the country was printed on page 306 of the BULLETIN for July, 1911.

Preserving Rubber Against Cracking.

W. B. D. writes: "A man in charge of a mine rescue-car here wants an application of some kind for rubber, to prevent it from drying and cracking. The rubber is used on the oxygen helmets, and it is important that no leaks arise from cracking."

For undeteriorated rubber 3-per-cent solution of phenol is the best. For deteriorated rubber, a 1-per-cent solution of potassium pentasulphide has been recommended, the restorative properties of the latter depending on the absorption of the sulphur from the pentasulphide.

Tubing can be kept for years in a 3-per-cent solution of phenol. It is necessary, of course, to use a suitable vessel, one in which the tubing lies in an easy coil.

We read in the literature that it is of the greatest advantage for all rubber goods, if seldom used, to wash them occasionally with water to prevent them from becoming too dry. Tubing which still possesses elasticity should be kept in vessels containing a dish of common petroleum. Keeping in wooden boxes is objectionable, while keeping in air-tight vessels alone is sufficient to preserve rubber for a long time. Exposure to light should be avoided.

Other methods of preserving rubber that might be tried experimentally first on a little tubing are as follows:

Steep the rubber materials in a bath of melted paraffin for a few seconds or several minutes, in accordance with the size of the article. Then dry in a room heated to about 212° F. Another method is to dip the tubing a few minutes in pharmacopœial ammonia water 2 ounces, water 6 ounces. Or immerse even longer, a half-hour or more, in this mixture until the hardened tubing resumes its former elasticity, smoothness and softness. The immersion should cover inner and outer surfaces. Warm water works better.

The use of 3-per-cent phenol solution is probably best, but a little trial will tell.

Making Percentage Solution of Ammonia.

B. F. G. writes: "Please publish a formula for making an aqueous solution of ammonia containing 10 per cent by weight, using the stronger ammonia water U. S. P., which contains 28 per cent by weight. How much 28-per-cent ammonia would it take by measure to make one pint of a 10-per-cent solution?"

By way of answer, we cite the following specific example appearing in Remington's Practice of Pharmacy, page 102: How much water must be added to 2 pounds of stronger ammonia water (28 per cent) to reduce it to ammonia water (10 per cent)? The answer is:

$$\begin{array}{cc} 10 & \\ \hline 28 & 0 \\ \hline 10 & 18 \end{array} \quad 10 : 18 : : 32 : 57.6 \text{ ounces of water.}$$

To make one pint of ten-per-cent ammonia water from 28-per-cent ammonia: 1 pint=473.197 Cc. 473.197 ×0.958 (sp. gr. of ammonia water)=453.322 grammes. This equals 45.3322 grammes of absolute ammonia or (45.33÷0.28)=161.89 grammes of 28-per-cent ammonia. Or one might solve the problem by proportion —28 : 10 : : 453.322 : ×, ×=161.89 grammes of 28-per-cent ammonia.

Walnut Hair Dye.

N. Z. S.—We do not know the formulas of the proprietary hair dyes which you mention.

Many of the so-called walnut dyes, however, are not made from walnut shells at all, but are of chemical composition, the following being an example:

Silver nitrate	45 grains.
Pyrogallic acid	3 drachms.
Distilled water	2 fluidounces.
Glycerin	6 fluidounces.

WALNUT HAIR OIL AND DYE.

Oils impregnated with the coloring principles of walnut shells have been recommended for dyeing the hair, thus serving as a combined oil and dye. The oil is to be applied daily, the hair acquiring a dark-brown tint. The following are said to be the best formulas:

(1)

Paraffin oil	16 fluidounces.
Alum, powder	4 drachms.
Walnut shells, dried	4 ounces av.
Alcohol	sufficient.
Perfume	to suit.

Moisten the shells with alcohol, add the alum and paraffin oil, heat on a sand-bath for an hour, then filter, and finally add any desired essential oils or synthetic perfumes.

(2)

Walnut shells, green or fresh	3 ounces av.
Alum, powder	3 drachms.
Olive oil	16 fluidounces.
Oil of rose	15 drops.
Oil of bergamot	25 drops.

Beat the walnut shells in a mortar with the alum, then heat with the olive oil untill all moisture has dissipated, filter, allow to cool, and add the aromatic oils.

Toothache Wax or Gum.

D. S. H.—Toothache "wax" or "gum" is a favorite form of toothache remedy. It consists of a waxy substance, usually yellow or white beeswax, which is sometimes colored red by keeping in a melted condition with alkanet root and then straining off the excess of root. This is mixed with anodyne substances like opium, oil of clove, chloral hydrate, etc., and then rolled into pencils, cut into appropriate lengths, wrapped in thin waxed paper, and preserved in small vials of

one- or two-drachm sizes. Or a better way is to immerse cotton in the fatty mixture, then cut and wrap the mass as before. In using, cut or pinch off a piece of the pencil, warm it gently by rolling between the fingers, and insert it into the cavity of the tooth, having previously dried the latter with a pledget of cotton.

(1) Venice turpentine .....½ ounce av.
Paraffin oil .....4 fluidrachms.
Salol .....¾ ounce av.
Yellow wax .....3¼ ounces av.
Alkanet root, sufficient to color.

Triturate together the salol, turpentine, and oil, then add to the wax, previously colored with the alkanet by melting, allow the mixture to cool, and roll into sticks or pencils.

(2) Paraffin .....3 ounces av.
Burgundy pitch .....3 ounces av.
Oil of clove.....1 ounce av.
Carbolic acid .....1 ounce av.

Melt the paraffin and pitch together and add the other ingredients when nearly cold, mix with cotton and cut into short rods. Wrap in thin waxed paper, and keep in small bottles.

PELLETS.

These are similar in composition to the "wax." The mass is divided into small pills, one of which is to be inserted into the cavity of the tooth to relieve pain.

(1) Opium, powder .....3 drachms.
Pellitory root, powder.....1 drachm.
Creosote, enough to form a mass.

Make into pellets weighing about one-half grain each.

(2) Oil of clove.....40 drops.
Oil of cajuput.....40 drops.
Sweet almond oil.....90 drops.
Opium, powder .....3 drachms.
Belladonna root, powder.....3 drachms.
Pellitory root, powder.....3 drachms.
Yellow wax .....4 drachms.

Melt the wax, incorporate the almond oil, beat in the powders and then the other oils, divide into pills weighing about one-half grain, sprinkle these with powdered clove, and keep them in bottles or well-closed boxes.

A Difficult Mixture.

A. B. G. has been having trouble with the following prescription:

Spirit of nitrous ether.....26 Cc.
Balsam of copaiba.....38 Cc.
Benzoic acid .....16 grammes.
Potassium citrate .....16 grammes.
Potassium acetate .....16 grammes.
Potassium iodide .....12 grammes.
Elixir buchu and hyoscyamus compound, enough to make.....120 Cc.

Mix. Signa: 6 Cc. every three hours in water.

He adds that he has tried to compound this mixture three or four times, but the preparation in each instance was not fit to be seen, much less to be taken.

The benzoic acid in this prescription is insoluble. There is not enough alcohol in the mixture to complete solution, thus causing the thick, unsightly mass. If we omit the benzoic acid the prescription gives a good appearance. It should be dispensed with a shake label.

Disguising the Odor of Camphor; Aspirin Tests.

H. H. asks what will take away the odor of camphor in a liquid or powder form. He also wants a test for aspirin.

You can't remove the odor of camphor. The most one can do is to disguise it with oils of lavender, bergamot, or rosemary, using one or all of them. If the camphor is not too strong, the odor can be masked, but if there is much camphor present, the oils will merely modify the odor.

As for tests for aspirin, the following data will be serviceable: It forms small, colorless, crystalline needles, melting at 135° C. (275° F.), odorless and of acidulous taste. To take the melting point is therefore one test. Secondly, aspirin forms clear, colorless solutions which do not develop a violet color on the addition of ferric chloride unless previously hydrolyzed by boiling with sodium hydroxide. It gives no reaction with silver nitrate and should leave no residue when heated on a platinum foil. Further information may be had from the manufacturers, Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color and Chemical Co., New York).

Antimonial Powder.

D. M. J. has received the following prescription:

Digitalis .....4 grains.
White antimonial powder.....6 grains.
Nitre .....30 grains.

Misce et fiat 1 powder.

He wants to know what white antimonial powder is.

This is a veterinary prescription probably calling for the grayish-white oxide of antimony, Sb_2O_3. In the Pharmacopœia of 1890 appeared antimonial powder (James's Powder), consisting of antimony oxide 33 grammes, and precipitated calcium phosphate 67 grammes, mixed. But that mixture is hardly intended here.

Ointment of Resorcin Compound.

P. D. E.—We do not know the composition of the proprietary preparation which you mention. If you have in mind something on the order of compound resorcin ointment, you will find a formula on page 191 of the National Formulary. It reads:

Resorcinol (U. S. P.).....6 parts.
Zinc oxide .....6 parts.
Bismuth subnitrate .....6 parts.
Oil of cade.....12 parts.
Paraffin .....10 parts.
Petrolatum .....25 parts.
Hydrous wool-fat .....35 parts.

Triturate the resorcinol, zinc oxide, and bismuth subnitrate with a small quantity of the hydrous wool-fat, until a perfectly smooth mixture is obtained. Incorporate this with the remainder of the wool-fat, add the paraffin and petrolatum, previously melted together, and lastly the oil of cade. Mix intimately, and preserve the ointment in containers protected from the light.

Violet Ammonia.

J. L. wants a formula for violet ammonia. The following recipe is said to be excellent:

Ammonia water, 10 per cent.....250 Cc.
Green soap .....120 grammes.
Oleic acid .....10 Cc.
Oil of bay.....1 Cc.
Oil of rosemary.....1 Cc.
Oil of verbena.....5 Cc.
Water, enough to make.....1000 Cc.

Dissolve the soap in 500 Cc. of warm water and when cool add the water of ammonia and the oils; mix by agitation, and add lastly the oleic acid and enough water to make 1000 Cc.

E. R. B. wants a formula of a preparation for marking or lettering slides for moving picture machines. Can any one help him out?

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THE MONTH'S HISTORY

THE NEW MANUFACTURERS' ASSOCIATION.

And now the manufacturers have formed an organization—the manufacturers of pharmaceuticals, chemicals, biologicals and surgical dressings. This is the last branch of the drug trade to have an association of its own. The retailers have had their American Pharmaceutical Association and their National Association of Retail Druggists. The jobbers have had their National Wholesale Druggists' Association. The patent-medicine proprietors have had their Proprietary Association of America. The manufacturers, however, have until now had no representation, except such as they could get by being associate and therefore indirect members of the jobbers' organization.

The new "National Association of Manufacturers of Medicinal Products" was formed last month in New York, and the following officers were chosen: President, Frank G. Ryan, of Parke, Davis & Co.; vice-president, Adolph Rosengarten, of the Powers-Weightman-Rosengarten Company; secretary, Charles M. Woodruff, of Parke, Davis & Co.; treasurer, Henry C. Lovis, of Seabury & Johnson; members of the Executive Committee, A. R. L. Dohme, of Sharp & Dohme, and C. J. Lynn, of Eli Lilly & Co.

The purposes of the new organization are simply what the purposes of all such bodies in the drug trade have been—to conserve, protect and advance the interests of that particular branch of the trade represented by the association. In the first place, the manufacturers need to get together and take definite action on a considerable number of things affecting themselves only—such as the labeling of products, the adjustment of differences, the prevention of fraudulent practices, and the like. In these days of legislative ferment, too, the manufacturing branch of the trade will now have a chance to be heard with one voice in Washington and elsewhere. Under the latter head it may be said that after discussing a number of congressional bills at the meeting last month the organization decided to send in a protest against the Richardson bill in its present form. As for anti-narcotic legislation, it was made clear that the manufacturers were in favor of all wise and proper restrictions, but would oppose burdensome details which promised nothing definite in the way of relief.

* * *

WASHINGTON AFFAIRS.

Reference in the foregoing article to the Richardson bill reminds us that practically all branches of the drug trade are against this measure. Its provisions were described briefly in this department of the BULLETIN last month, and its primary purpose is to so amend the Federal food and drugs act as to bring false and exaggerated remedial claims within the application of the law. No one seems to object

to this fundamental object, but the Richardson bill goes farther and provides for a lot of unnecessary things. The patent-medicine interests, indeed, are afraid it would even wipe out the whole industry. The N. A. R. D. is against the bill in its present form, but will seek to have it so modified that the good in it will be retained and the bad rejected.

Several other bills proposing to amend the food and drugs act are pending in Congress, and the report now is that a general hearing on all of them will be granted some time within the next few weeks. Something like order will probably be wrought out of all this chaos. In the meantime the tentative ruling regarding narcotics has not been adopted by the Department of Agriculture, and may not be. Secretary Wilson has announced that the new method of issuing tentative rulings in advance will be abandoned anyway, and this is supposed to be an offense to Dr. Wiley inasmuch as it was Wiley who stood sponsor for the proposed narcotic ruling. Rumors have been current in Washington during the last month that in view of this and other conditions Dr. Wiley might resign, but we ourselves don't take any stock in such conjectures.

In the meantime the Congressional Committee has promulgated its report on the Wiley-Rusby situation, as readers of the newspapers know. The committee practically exonerated Dr. Wiley from anything but technical blame, although most of the other issues raised in the congressional investigation were dodged adroitly. About the only definite opinion expressed was one holding the Remsen Referee Board to be operating without proper authority of law. It seems to be the general notion, however, that Secretary Wilson will not listen to any proposition to have the Remsen Board abandoned.

* * *

THE INTERSTATE LIQUOR BILL.

While on the subject of national legislation we may report that the N. W. D. A. seems quite worried over a bill in the House, the purpose of which is to prevent the interstate shipment of liquors into prohibition territory. It has been found during the last few years that the State anti-narcotic laws on the one hand, and the State local-option or prohibition liquor laws on the other, have been largely nullified by the freedom with which shipments could be received across the border from another State. The only possible method of stopping this leak is by means of national legislation regulating interstate commerce.

The bill to which the jobbers object is one which has been designed for this express purpose, so far as the sale of liquor is concerned. In a word, it simply provides that intoxicating liquors, including alcohol, may not be shipped into a State in violation of any law of that State itself. It can thus be seen at a glance that the object is merely to protect the State in the enforcement of its own acts. The chairman of the Committee on Legislation of the N. W. D. A., however, has issued a protest against the bill on the ground that it would greatly cripple the drug, perfume, and allied trades in dry territory by denying them alcohol with which to carry on manufacturing operations, and would further cripple the retail druggist by making it impossible for him to purchase wines and the like intended for sale on prescription for medicinal purposes.

There is much force in this argument, but it seems as if some form of bill might be drawn up which would protect dry States in the enforcement of their prohibition and anti-narcotic laws without crippling legitimate interstate commerce. On the one hand, it is scarcely open to doubt that if the people of a State want the liquor traffic killed within their borders they should have a right to demand of the Federal government that their purpose be not defeated by means of interstate shipments. On the other hand, it is equally true that the industries of a State ought not to be subjected to peril or destruction through overzealous restrictions put upon free commerce.

* * *

RAISING THE REQUIREMENTS.

The educational requirements in pharmacy are gradually being elevated, and actions of importance have been taken in three States during the last few weeks. In Pennsylvania the new Bureau of Professional Education, established by law at the last session of the legislature, has determined upon a completed first year high school course, or its equivalent, for licensure to practice pharmacy. In accordance with this standard the State Pharmaceutical Examining Board has adopted a new rule that applicants for license as assist-

ant pharmacist, applying after March 1, 1912, and applicants for license as pharmacists, matriculating after July, 1912, must have a certificate of preliminary educational qualification issued by the Bureau. In Missouri the Board of Pharmacy has likewise established the requirement of one year of high-school work or its equivalent.

In the State of Washington the Board of Pharmacy has formally declared that after July 1, 1913, all applicants for examination as registered pharmacists must have completed one year of work in a college of pharmacy recognized by the Board, and after July 1, 1914, this requirement will be advanced to full graduation from a college embracing at least a two years' course. The particular colleges to be "recognized" are the two State schools of pharmacy in Washington and such other schools and colleges as hold membership in the American Conference of Pharmaceutical Faculties.

The voluntary establishment of the graduation prerequisite by the Washington Board may seem somewhat arbitrary, but it would appear that the Board is given the necessary power by the pharmacy act to "prescribe the preliminary education of applicants for examination." The Washington Board, indeed, seems to be making a name for itself in several particulars. Among other things it recently summoned two registered pharmacists to show cause why their certificates should not be revoked because of the illegal sale of liquor. It has also adopted a regulation requiring assistant pharmacists to obtain full registration within two years or else cease practicing at the expiration of that time.

* * *

'PHONE MATTERS.

Telephone matters seem to be in a bad way in several sections of the country, notably in St. Louis and in certain cities in New York State. The telephone companies are evidencing an unfortunate disposition to cut down the druggists' commissions, usually to 10 per cent. In Buffalo the druggists entered a strong protest, and the result was that the company removed the booths from their stores. The local association took the matter up with the Public Service Commission, and at this writing a permanent adjustment has not been made.

In New York City something like 75 per cent of the pharmacists signed an agreement to act together in whatever measure should be taken against the company, and the last we heard a subcommittee of five had been appointed to deliver an ultimatum to the company to the effect that pay stations in all the stores would be at once discontinued unless adequate compensation were paid for services rendered. Previous to that the company had asked for 30 days' time in which to reconsider its notice of reduction.

In Rochester and Syracuse much the same conditions exist as in New York and Buffalo, except that there many of the druggists are taking the initiative by discontinuing their Bell pay stations. In Rochester the reduction was from 40 to 10 per cent, and this made the druggists particularly angry. In some instances the druggists took their grievance into the newspapers, and wherever that was done the company immediately retaliated by removing the booths and pay stations. In St. Louis also things seem to be in a bad state, and about the only hope the druggists apparently have is that some relief will be afforded by the investigation now being made into the whole telephone situation by the Public Service Commission.

* * *

DOCTORS COMPLAINING TOO.

Druggists for years past have voiced their opposition to the gratuitous distribution of serums and other supplies by municipal authorities. They have no objection if the city furnishes antitoxin free to people who are really poverty-stricken. But they feel that not a few avail themselves of the privilege who are abundantly able to pay for the supplies.

Now the physicians, too, are beginning to complain about governmental interference with private practice. Too much medical service is bestowed gratis. Present standards of humanity make it easy for politicians in the big cities to establish hospitals for the free treatment of disease to the obvious injury of independent physicians not affiliated with the institutions. This is regarded as a downright imposition on the rights of the private practitioner just as much as the gratuitous distribution of serum is unfair to the pharmacists. In either profession years of study and expensive laboratory courses are required of candidates

for a degree. No wonder they feel aggrieved if, after a lengthy training, the graduates find their functions usurped by a paternalistic government.

It is distinctly un-American. As for charity, it is a question whether the recipients of such benefits are the better for them. Charity abused means injury to the poor as well as to the taxpayer. And as for the physician, his income is already sufficiently depleted by modern sanitation and hygiene without the health officers interfering in his cases. The regular city hospitals, too, are giving cause for complaint. Such institutions, where the well-to-do as well as the poor may enter, mean injury not only to the general medical practitioner but also to the pharmacist. For too often the inmates are people of fair means who enter hospitals chiefly to avoid paying a doctor his fee and the pharmacist his drug bill.

* * *

AFTER THE DOPE SELLERS.

Last winter the Pennsylvania Board of Pharmacy carried on a vigorous warfare against the illegitimate sale of narcotics in Philadelphia. This winter the scene shifts to San Francisco, where the California Board of Pharmacy is waging a similar campaign. It would seem from newspaper clippings which have been sent to us that a lot of good is being done in 'Frisco, and that the dope sellers are on the run. One druggist has been arrested who is claimed to be the "leader of the drug ring." This man is said to be the head and center of a distributing system by means of which narcotics were shipped in and out of 'Frisco. One of the ramifications was a fictitious company at that famous divorce transfer point, Reno, Nevada, and when things got hot dope was shipped to this concern from 'Frisco, and from there back across the State border to the consumer direct, thus evading the California law.

After the fellow had been arrested 1100 ounces of narcotics, consigned to him, were seized at a freight house at the ferry. The wholesale cost was placed at $6000 and the retail valuation at $20,000. So great was the consumption of narcotics that the "drug ring" was said not to be able to get all of its supplies from this country, but to be purchasing heavily every month from a concern in London, England.

What makes the narcotic situation so complex in San Francisco is the presence of so many opium-smoking Chinese, and several Chinamen have been arrested as the result of the detective work done by the Board of Pharmacy. The druggists of the city are standing by the Board, and the local association recently passed resolutions of support and coöperation.

* * *

SENATOR OWEN AMENDS HIS BILL.

The objections to the Owen bill for a National department of health at Washington have arisen largely out of a belief that such a department would interfere with private practice, medical and pharmaceutical. The N. A. R. D. at the Niagara Falls convention passed a resolution to the effect that at least one governing member of the proposed department or bureau be a pharmacist. If the right man were appointed, this would not only give pharmacy representation but likewise a certain amount of protection. However, it must be admitted that fear of the bill has been quieted by the recent amendment moved by Senator Owen himself. It shows plainly that the purpose of the bill is to prevent disease without interfering with its particular method of treatment. The amendment reads as follows:

> That the department of health established by this act shall have no power to regulate the practice of medicine or the practice of healing, or to interfere with the right of a citizen to employ the practitioner of his choice, within any State of the Union, and all appointments within the department shall be made without discrimination against any school of medicine or of healing.

With this amendment adopted, there seems little room for objection to the Owen bill.

* * *

DR. SANDER DEAD.

The death of Dr. Enno Sander removes one of the interesting figures in pharmacy. Dr. Sander was 90 years old, and his sprightliness combined with his longevity had for many years been cause for comment. He was formerly active in the American Pharmaceutical Association and among other capacities had served the organization as its president. In his home city of St. Louis he was always prominent in pharmaceutical and scientific circles, and he served as treasurer of the St. Louis Academy of Science for a period of 46

years. He was also one of the mainstays of the St. Louis College of Pharmacy. Ten years ago Dr. Sander's numerous friends made him the guest of honor at a banquet in celebration of his eightieth birthday, and it is an interesting fact that the souvenir of this occasion was only distributed a few weeks ago. Dr. Sander was a bachelor and made his home at the Washington Hotel. The funeral, which was held on February 15, was attended by officers of the St. Louis Academy of Science, officers of the St. Louis College of Pharmacy, several members of the Chicago Veteran Druggists' Association, and representatives of other bodies with which Dr. Sander had been closely affiliated.

* * *

It is exceedingly gratifying to report that a marble tablet in memory of Prof. William M. Searby has been placed in the entrance hall of the California College of Pharmacy—the institution which he served so long and so ably. The unveiling ceremonies were held recently, and the principal address was made by Dr. Benjamin Ide Wheeler, president of the University.

* * *

The State Board of Health in Louisiana, and the State Board of Pharmacy in Iowa, have recently ruled that the sale of proprietary articles and pharmaceutical supplies is prohibited except in regularly established drug stores. It is to be hoped that these regulations will prove enforcible.

* * *

Charles H. Huhn, ex-president of the N. A. R. D., the A. D. S., and a few other things, was recently appointed to membership on the Minnesota Board of Pharmacy while he was in New York on a business trip. It was rather unkind to take advantage of the man's absence in that way!

* * *

Edward P. Dehner, a well-known druggist and Democratic politician in Cleveland, died recently from pneumonia. A portrait and a sketch of Mr. Dehner's political activities were published by us in the BULLETIN for February of last year.

EDITORIAL

THIS ISSUE OF THE BULLETIN.

We have tried hard to make the present number of the BULLETIN one of the best we have ever published. We should like to have you look it over and tell us what you think about it frankly, whether your opinions are favorable or unfavorable. In publishing a journal our supreme purpose is to please our readers, not ourselves, and we always like to know whether we are doing it or not. Suggestions are in order.

Here are some of the things in the present issue to which we should particularly like to call your attention:

1. In the first place, our Illustrated Section comprises six pages of nothing but pictures, and we certainly hope they will prove interesting. There are nine portraits of well-known jobbers, nine portraits of presidents of State pharmaceutical associations, a special picture of the new president of the A. Ph. A. taken for us in his office, a full-page reproduction of the druggists' float used this year in that wonderful "Tournament of Roses" in Pasadena, and two full-page engravings of one of the most famous drug stores in the country—the headquarters establishment of the Judge & Dolph Company in St. Louis.

2. We have induced ten successful druggists, from different sections of the country, to tell our readers what methods they use in the collection of bills, and what schemes they employ to prevent "dead-beats" from "working" them. These ten contributions will be found of the utmost value and practical interest.

3. We are beginning with this issue a series of articles on sundries which will run for several months. These will all be written by experts and they will contain technical information which will enable the druggist to talk side lines to his customers more intelligently. The contribution this month is devoted to chamois skins, and others will discuss rubber goods, brushes, razor-strops, and the like.

4. The autobiography of Mr. Farrington, which began in the January number, will be continued for several months. This plain, practical, helpful story of how an average druggist worked out his destiny in a country

town is proving most readable and suggestive to our subscribers.

5. A series of articles on "My Best Paying Side Line" is being inaugurated in this issue. These papers have been called forth by one of our recent prize offers, and we are collecting a lot of most valuable material. Many of the side-lines described are novel in character, as is the case with the first article published this month, and the net result of the whole series will be that our readers will receive many tips in their endeavor to increase business and make more money.

As usual, too, we are printing some articles purely of an entertaining character. In this class is the instalment of "Exciting Experiences." For the rest, we have sought in the various departments to cram the journal full of the most practical, useful, helpful material we could buy, beg, borrow or steal, and we hope this issue of the BULLETIN will prove to be what we are so anxious to make it.

LIME-WATER ONCE MORE.

Many druggists are very careless about the preparation and handling of lime-water. They seem to look upon the product as being of doubtful efficiency anyway, and they fall more or less unconsciously into the habit of assuming that it doesn't matter very much whether the lime is present in full strength or not. Quite frequently, too, lime-water is given away by druggists, and this custom contributes to the general attitude of indifference toward the substance.

And yet, every once in a while, an investigation is made, things are found not as they should be, and druggists are warned that they must mend their ways. Thus several years ago the Pennsylvania State Pharmaceutical Examining Board had samples of lime-water purchased from 300 druggists. It was found on that occasion that 181 of the specimens were below the U. S. P. requirements! Many of them were less than one-half, less even than one-quarter, strength, and some of them were no better than hydrant water.

An interesting article, entitled "Where Does the Average Druggist Get His Lime?" was contributed by Prof. Charles H. LaWall to the last meeting of the New Jersey Pharmaceutical Association. Professor LaWall explained that he had started out by selecting twelve prominent pharmacists—men who were leaders in association work. He had asked them two questions: First, "Where do you get your lime?" and secondly, "How do you test your lime-water?" Five of the twelve men replied that they used a pulverized calcium oxide put up specially for the preparation of lime-water; two others used another form of special lime; one man employed "selected building lime;" another got his material from the "nearest building operation;" another from the "lime dealer;" while still another man declared that he got his lime anywhere he could!

So much for the lime employed in making lime-water. As for the extent to which these twelve men tested the resulting product, Professor LaWall was very much discouraged to find that only one of them titrated the preparation by the U. S. P. method. Six of the twelve men practically declared that they did not test their lime-water at all; three asserted that they tasted it; one man blew into it through soda straws; while another added solution of ammonium carbonate and noted the bulk of the precipitate.

Now, then, asks Professor LaWall, "If only about 8 per cent of the leading professional pharmacists actually test their lime-water, what percentage make use of the more complicated assay processes or quantitative methods of estimation of constituents indicating medicinal activity?" This question, as the Professor went on to explain, is one which has an important bearing upon pharmacopœial revision work, for the revisors are constantly endeavoring to so simplify all processes as to make them applicable by the average retail pharmacist. If the pharmacists are not going to employ them, what is the use of having them?

We venture the assertion, in partial reply to this indictment, that for reasons already mentioned the druggist is more careless in the preparation of lime-water than he is with the great majority of products in his stock. There will be an awakening as the food and drug laws become more stringent, and as the enforcement of them becomes more general.

THE SPIRIT OF RESTLESSNESS.

Generations ago caste spirit was strong. Men lived their lives on a single plane. The son's position was that of his father. Nor was there any chance of altering one's position in life. Caste ties were too strong to be broken.

What was the result? Were men more satisfied with their lot than they are to-day? No. . More complacent? Not a bit. But they were more resigned. They accepted their fortune with a spirit of stoicism, bore their disappointments without grieving and without resentment.

But to-day how changed is all this! Instead of repressed emotion and a calm indifference to the vicissitudes of life, we hear everywhere the murmuring of the disgruntled. Workingmen, far from accepting their due with resignation, chafe under their restraints. In Europe where caste ties are strong there is perhaps less of this. But certainly in America the very possibility of extricating oneself and family from the mire is sufficient to stir the ambition of men.

Everywhere is seen a spirit of restlessness. It is characteristic of the age. Even pharmacy feels it. The National Association of Drug Clerks had hardly been organized when it was approached by the American Federation of Labor and invited to join. The clerks refused, however, on the ground that pharmacy, being a profession, could not be identified with labor. It was no slap at unionism. A drug clerks' association is not in the nature of things suited to join the Federation. You can dictate to a man how many bricks he shall lay a day after the fashion of the union. But it would be hard to specify the number of pills that constitute a fair day's work for a pharmacist. The duties of the pharmacist are too numerous to permit of a prescribed standard.

Nor would such a standard be desirable. The drug business would suffer by it. It would be unwise to limit the output of any pharmacist. The clerk should be free to "realize" himself. He should be allowed to work to the maximum of his individual capacity unfettered and without restraint. Why, the greatest spur to effort in any industry is the realization that by dint of toil one can lift himself out of his present level to a higher plane! We see that sort of thing done every day. Borrowers becoming lenders, wage-earners becoming capitalists. Likewise the rich are seen to step down from capitalism to a position of dependence.

These very changes of fortune keep business interesting. And it must be ever so. Men are not all equal. Neither are the stars, nor the things that grow. No two planets are alike, no two trees. Nature is the law of infinite variety. And what is true of nature is true of men. There are bound to be differences of thrift, of economy, of self-denial, of hard, downright industry. Individuals will always differ in capacity. Some are intended to be clerks, some proprietors, and lucky is the man who knows his place.

Nor must it be supposed that labor is the cause of all wealth in the drug business. Wealth springs often from inventiveness, from a capacity to make two blades of grass grow where one grew before, from an ability to accomplish with one dollar what another requires two to do. Labor admittedly spells a lot in the success of every venture, but not all by any means.

OUR PRIZE OFFERS.

We have recently been announcing in the BULLETIN three prize contests. For two of them we have now had a sufficient number of entries, and the Prize Committees will soon make the awards and announce the results. We are referring now to the prize offers for best formulas for a hair tonic and best papers on the sale and fitting of trusses.

Our third prize contest, however, is still open—the one in which we offer to pay $5.00 for every accepted article on "My Best Paying Side Line." This has brought forth some excellent material, and the first of the many papers we have received is being published this month. The subject of side-lines is so important, though, that we should be glad to have other contributions submitted from time to time, even though it may be many months before we can use them.

The Burrough Bros. Manufacturing Co., manufacturing chemists of Baltimore, has gone into the hands of a receiver. Insufficient working capital, it has been stated, rendered it impossible to continue the business.

The Big Judge & Dolph Pharmacy in St. Louis.

The Judge & Dolph Drug Co. own and conduct a chain of three prosperous stores in St. Louis. Our picture shows the salesroom of the headquarters establishment at 515 Olive Street. Here an entire building of six stories and basement is utilized, and a trip through the place conveys an eloquent lesson of the present-day possibilities in the drug business if the opportunities are seized upon and followed up by men of brains, capital, and commercial instinct. One hundred people are employed in the headquarters building alone.

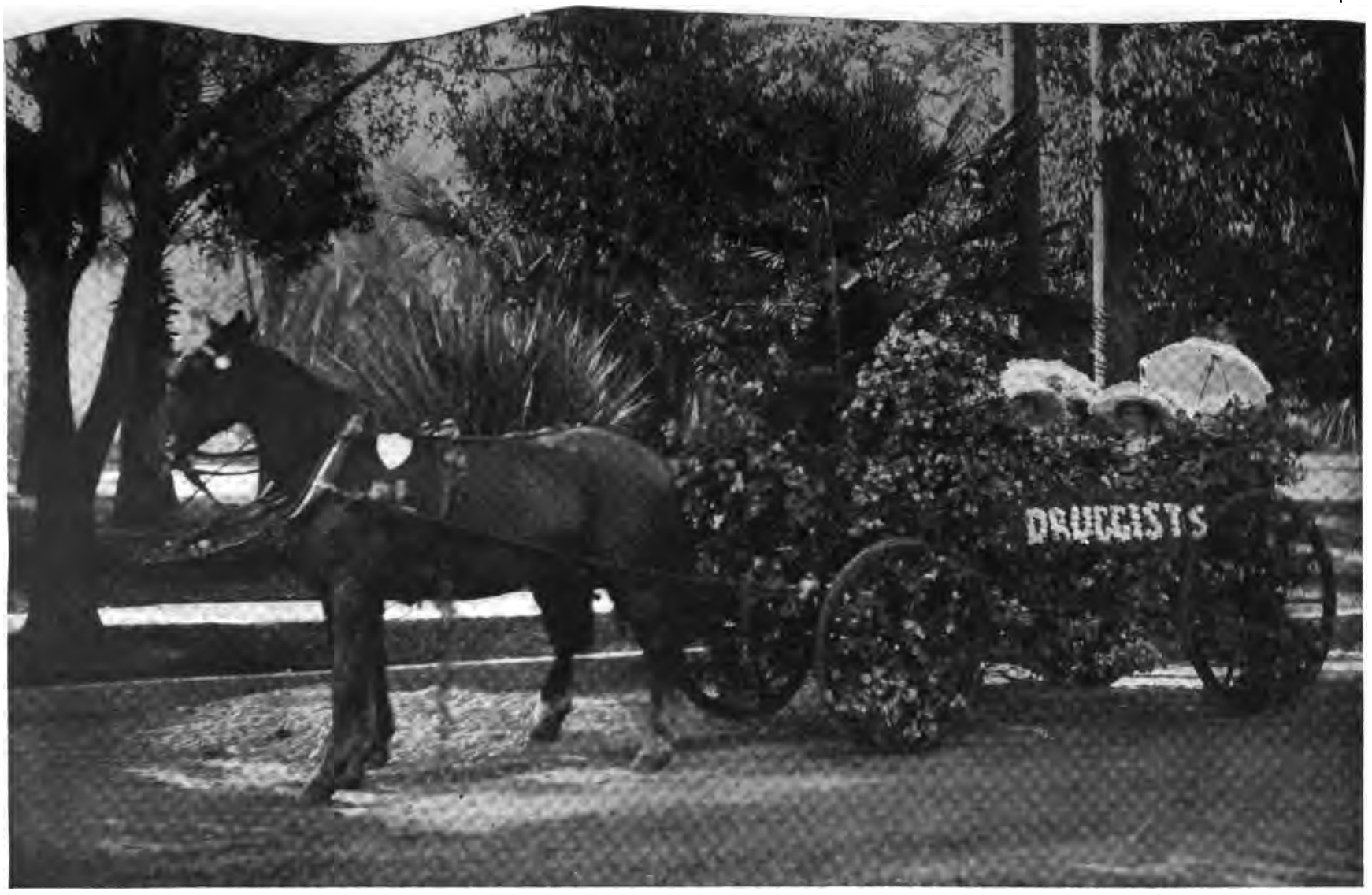
The Big Judge & Dolph Pharmacy in St. Louis.

This picture shows the new iceless fountain furnished by the Bishop-Babcock-Becker Co. at the headquarters store of the Judge & Dolph people a year or two ago. It is located at the immediate left of the front entrance. Everybody told Mr. Judge that he made a mistake in throwing out the stools when the new fountain was installed, but he argued that when people sat down to drink their soda they stayed twice as long, and that without stools it would be possible to serve double the number of customers. His judgment has been vindicated—the soda business is about twice what it was before the change was made.

[Photograph made especially for the BULLETIN OF PHARMACY.]

The New President of the American Pharmaceutical Association.

Prof. William B. Day, recently elected president of the A. Ph. A. for the year 1912-13, was photographed for the BULLETIN OF PHARMACY in his office at the School of Pharmacy of the University of Illinois, in Chicago. Professor Day is the secretary of the faculty, is really the business manager of the institution, and is acting Dean during the absence this year of Professor Goodman.



Float of Pasadena Druggists in the Annual Tournament of Roses.

This brilliant spectacle is one of the annual delights in the wondrously beautiful city of Pasadena, Cal. Usually each group of business men get up for the parade a float representing their particular branch of trade or industry, and we are showing the one used for the druggists of the city in the tournament this year. The four beautiful women who added the last touch of grace to the float are unfortunately not very well seen in the engraving.

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E. H. Nelson, President and General Manager of Nelson, Baker & Co., Detroit.

Frank G. Ryan, President of Parke, Davis & Co., Detroit, Mich.

F. K. Stearns, President of Frederick Stearns & Co , Detroit, Mich.

G. A. Pfeiffer, Secretary and Treasurer of Wm. R. Warner & Co., Philadelphia.

J. K. Lilly, President of Eli Lilly & Co., Indianapolis, Ind.

George Merrell, President and Treasurer of William S. Merrell Chemical Co.

E. G. Swift, Secretary and General Manager of Parke, Davis & Co., Detroit.

E. Stauffen, Treasurer and General Manager of Sharp & Dohme, Baltimore, Md.

Theodore Weicker, Vice-President of E. R. Squibb & Sons, New York, N. Y.

A Page of Prominent Manufacturers.

Edward A. Fuge, Minneapolis Drug Co., Minneapolis, Minn.

H. B French, Smith, Kline & French Co., Philadelphia, Pa.

Frank A. Faxon, Faxon & Gallagher Drug Co., Kansas City, Mo.

Charles S. Martin, Spurlock-Neal Co., Nashville, Tenn.

Edgar D. Taylor, Powers-Taylor Drug Co., Richmond, Va.

C. P. Noyes, Noyes Bros. & Cutler, St. Paul, Minn.

P. P. Van Vleet, Van Vleet-Mansfield Drug Co., Memphis, Tenn.

James W. Morrisson, Morrisson, Plummer & Co., Chicago.

Cyrus P. Walbridge, J. S. Merrell Drug Co., St. Louis, Mo.

A Page of Prominent Jobbers.

A DEBATE ON COLLECTIONS.

Ten Live Druggists Tell How They Make the Debtor Disgorge—The Systematic Mailing of Statements—Keeping Poor Accounts Off the Books—Bringing Delinquents to Time by Personal Solicitation or Through the Intervention of a Collection Agency—Other Methods of "Cleaning Up."

It would be hard to conceive of a subject fraught with more practical importance to the druggist than that of making collections. Fortunate indeed is the man who goes through the year without incurring a number of worthless accounts. To his disappointment, people whom he considers trustworthy often prove otherwise. A certain number of undesirables gain accommodations at the store despite every effort to keep them out. The druggist has every kind of delinquent to handle, from the man who is slow but sure to the downright dead-beat who won't pay his bills and can't be made to. In this symposium we present the ways and means adopted by the different pharmacists to safeguard themselves against such customers. They tell how to prevent debtors from piling up accounts. They describe how they make collections successfully from people who are as reluctant to pay the druggist as they are the doctor. Their contributions should be read with profit and interest by our subscribers generally.—THE EDITORS.

BY ERNST O. ENGSTROM, PITTSFIELD, MASS.

The National cash register cash and credit statement book number 14 gives me the information needed to determine the condition of

E. O. Engstrom.

my credit business. With the use of this book, I know the amount due on credit sales, and if a month shows that my credit sales are more than the amount received on account, I make a special effort to collect. Last year, 5 months I collected more than I charged, 7 months I charged more than I collected.

HIS CREDIT LOSSES.

During the month of January I make a list of all accounts due me and compare their total with the amount I should have according to the record kept, during the year. I always find a small loss due to allowances or some other cause. I also destroy records of such accounts as are impossible to collect, as it is a waste of stamps, time and worry without any returns to try to collect them. I lose about 1 per cent, and the most I have ever charged to this loss is 2 per cent. This year I lost $86.

I send out bills every month to most of my credit customers whose accounts I carry on my books regularly. To customers who seldom ask for credit I send bills once every two months. I carry the latter class of accounts in a filing case and divide the accounts in two sections, sending out the accounts filed under letters A to M, one month, and the others under N to Z, the following month.

To any person who needs medicine and brings in a bona fide prescription I will give credit if needed. I am also willing to trust such persons as I find have had a prolonged

sickness in the family and heavier expenses than usual. I have lost many of these smaller accounts, but I believe it is a part of charity we should practice. If I cannot collect such accounts within one year after making the last charge, the best way is to destroy all record of them. It helps your peace of mind.

COLLECTING FROM DOCTORS.

Doctors are different. It is hard to understand their ideas on the payment of accounts. Each man has to be treated by himself.

Most of them pay promptly if you let them understand that you need the money. And if mailing statements does not bring any returns, a personal interview is the most effective. Sending your clerks to collect does not bring the results unless the doctor is a personal friend of the clerk. If doctors are inclined to believe that we as druggists should furnish the medicine they give their patients to the detriment of our business, I let them understand they cannot get any goods from me without cash. I treat the accounts of doctors in the same manner as those of others with the above exception.

GETTING AFTER THE HARD ONES.

I send one of my clerks out a few times during the year to find out from a debtor the reason why no attention has been paid to the several statements sent. I inquire whether the bill is wrong, or whether there are any other reasons why it should not be paid. I never have tried to collect any accounts through collection agencies or lawyers unless my debtor were declared a bankrupt. A few years ago I gave a lawyer certain bills to collect. He asked me whether I did not have some I could not collect myself. I handed him about $50 worth of worthless accounts. He did not collect any, but I received $3.75 from one delinquent and the lawyer claimed I should pay $2.50 for postage, etc. The collection of $3.75 was made possible by the fact that the man I had trusted inherited a small amount from an uncle who died.

I believe that we ourselves are the best collectors, if we only keep constantly at it and know how our credit business stands. The extra efforts which I mentioned are simply to write a few words at the foot of the statements sent out, asking for payment. I word this statement to suit each case.

BY S. L. HILTON, WASHINGTON, D. C.

Conducting a credit business, in my judgment, is one of the most vital subjects the retail druggist has to handle. There are many things in connection with a credit business that are usually overlooked, as, for instance, What percentage of credit sales are forgotten to be charged by both proprietor and clerks? What percentage of the total yearly credit business has to be charged to profit and loss? What percentage of increased profit has to be added to the selling price of goods, when sold on credit, to make up for losses sustained by failure to make charges and also to cover bills impossible to collect?

CASH BUSINESS BEST.

I am frank to admit that usually you can dispose of more goods when sold on credit than what is possible on a cash basis or where

S. L. Hilton.

only a limited credit business is conducted. Personally I would much prefer to do a smaller business for cash than a larger one with numerous credit accounts, for the reason that I do not have to take into consideration the question of collecting, nor have I the extra labor entailed thereby, in keeping accounts, mailing bills, etc., and the consequent expense. The time necessary to keep accounts and make out bills, let alone the losses bound to follow, is certainly worth money. Yet in the large majority of cases these facts are not taken into consideration. Consequently the net profit at the end of the year, on a credit business, no matter how carefully conducted, will be less than would accrue from the same volume of business done on a cash basis.

I never fail to send out bills each month,

no matter how small they may be, and have done so during the twenty years or more of my business. These bills are mailed and received by the customer on the first day of each month provided it is not Sunday.

"FOLLOWING UP" ACCOUNTS.

My method of following up acounts is this: I send the bill again with a statement to the effect that our business is cash. In exceptional cases, credit is extended for a limited time only. Under no circumstances can bills run over thirty days.

If bills are not paid after these preliminaries, I call on the parties personally. I never send any one to make collections until after I have seen them personally and have failed to obtain a settlement.

I never extend credit to any one unless he gives references. I look him up personally or communicate by phone and invariably I will follow my first impressions. I make it a point to inform the customer that credit is extended for 30 days only and that I expect prompt settlement of bills when rendered. It is a great mistake in my judgment not to let credit customers understand at the outset when you expect settlements. Of course an occasional person, no matter how careful you may be, will slip in, in a great hurry for a prescription, or some trifle, on credit. This cannot be avoided. But if he attempts to run or start an account by this method, I look upon him as suspicious and demand to know something of his financial responsibility. I ask for references to learn about his standing and promptness in settling his obligations.

SOME FIGURES.

My credit business does not exceed $200.00 a month and my records will show that during the past 15 years my losses have not exceeded $25.00 a year. I believe fully in the principle that when people ask for credit, they are the ones receiving the accommodation. You are accommodating them with your goods, your money, and you are in a position to dictate terms to them the same as a banker does when he loans you money, and insists on the terms being carried out. If your demands are not acceded to then at the end of the period mutually agreed upon at the outset, you should close the account and request settlement. This action, while it no doubt angers some, is proper. Those who take offense are the class you do not care for. One is far better off without their trade than with it unless on a cash basis. It will also be evident that at this point your loss is the smallest possible loss you are going to have. Therefore, is it not better to take the loss at the end of the period mutually agreed upon, if prompt settlement is not made or a good excuse given, than to go along for months with all of the worry and labor connected with such accounts and in the end lose more than what would be lost the first month? Take your loss promptly and be done with it. As soon as credit customers know and understand that it is purely a business proposition and that you are conducting your business on this basis, you will have little trouble and exceedingly small losses.

BY A PACIFIC COAST PHARMACIST.

We do a credit business, and it is our practice to send out statements regularly every month whether there are any additional purchases for the current month or not.

We employ a collector to whom a certain portion of our accounts are submitted each month. We open accounts with the understanding that they are to be settled on the first of each month. We also place a credit limit on each account. If our terms are not complied with, then we attach a sticker to the statement, like the one illustrated.

If the credit limit is exhausted, the matter is called to our attention by our bookkeeper. If in our judgment it seems necessary, the customer is notified that we should not like to extend the account further, and he is asked to keep it within its present limit by paying cash, and in addition to conform to our regular terms of monthly settlements.

We do not personally collect, but we have reports made to us daily by our collector, and in case of any disputed accounts, or of any complaint of service, by our customers, we take it up by letter or personal interview.

BE CAUTIOUS ABOUT GRANTING CREDIT.

We discriminate in the matter of opening accounts so as to guard against "dead beats." This is done first by requiring references from prospective customers as to their dealings elsewhere, and secondly by obtaining confidential reports from a local commercial agency. We allow none of our clerks the discretion of

opening accounts, requiring that they be approved by the management except in emergencies and on orders for urgent medicines. Then we allow them to make charges which they distinctly state to the customer are temporary and do not constitute a formal opening of an account that can be enlarged. These accounts are then investigated, and if the customer

PLEASE NOTE TERMS

Our terms for credit accounts are prompt settlement each thirty days. Selling as we do all our goods at the lowest cash price, it is necessary for us to make this requirement.

"JONES" DRUG CO.

This sticker is attached to statements of accounts 30 days overdue.

seems to be a desirable risk, a letter is written inviting him to open an account for his convenience and ours.

In case our terms are not complied with then, customers are temporarily suspended from credit, and notified to this effect, subject to reinstatement when our requirements have been met. In the case of "dead beats" or of accounts that are being wilfully neglected, we notify the customer of our intention to offer the account for sale through the Credit Underwriters' Association. This association places forms of letters in our hands in series of three that are to be exhausted before the account is actually turned over to them to be advertised for sale. The last one of these three letters carries with it a sample poster of ad-

Regarding this Account

We are members of the "Blank" County Retailers' Association, which includes all the prominent retailers in Podunk and vicinity.

In order to maintain our policy of close prices, and also to meet our own obligations, it is our custom to turn over to the Association for collection accounts that have stood unpaid for so long as this.

However, all members are notified of accounts so placed, and we are withholding this, pending a prompt reply from you, either with a remittance or a statement as to when payment will be made.

"JONES" DRUG CO.

This sticker is gummed to statements of accounts 60 days overdue.

vertised accounts showing that accounts are actually offered for sale. In the event of settlement, the payments are either made to us or to the underwriters, who make charge only for the use of the letters, amounting to about 25 cents for each set. Besides, there are some few accounts that we turn over to law and collection agencies. But these are usually accounts where the contractors have moved out of our location.

NO GENERAL RULE POSSIBLE.

In conclusion let me say that while we use printed notices and form letters, there is no system that can be simply placed in operation and be expected to take care of itself. Tact and judgment must be used all along the line. It must be borne in mind that in addition to collecting an account, we are also interested in retaining our customer and his good-will. Even in the most flagrant cases of delinquency of payment, the customer should be made to feel that we are thoughtful both of his interests and his feelings, and given to understand that only business necessity requires the pressing of his account. Now this, of course, is a statement regarding methods applicable to trade in the larger cities. In rural communities entirely different methods would have to be followed.

BY ARCH KRIEG, CHARLESTON, W. VA.

Of all the "bum" collectors that ever conducted a business, the "bun" belongs to me. My advice and methods, therefore, are given in order to show others how not to do it. As my fond parent remarked after he licked me once by mistake, "That's to teach you what will happen if you should ever do what I licked you for."

UNIQUE METHODS.

Yes, I send out monthly statements, usually getting responses sufficient to cover postage. But if a man should voluntarily come in to pay a bill, I would probably ask him, "Are you quite sure it is convenient for you to pay it now?" That makes him proud of his credit and causes him to insist on paying it at once, you know.

If a debtor does not come around and either make an excuse or a promise to pay, we send him another statement on the first of the following month. If he does not respond after three statements, we add on the next one we send him, "To work, postage, etc., on 4 statements, $1.00." This always brings him around with a kick. I have never known it to fail yet. I have considered very seriously the plan of putting on statements the words, 25 cents extra charged for each additional statement sent, though that might ruin "the kick."

NO PITY ON DEAD-BEATS.

Sometimes after an account gets old enough to vote, we get real peevish and go after the chronic delinquent. Or if we get in a tight place for funds, which is almost a continuous performance with us, we send out a clerk or

Arch Krieg.

even a collector occasionally. And we have considered the advisability of sending out a book-agent or an insurance solicitor or even a lightning-rod agent in a few extreme cases.

As to chronic dead-beats, we have a list of all of them, for they have all worked us. And if any have missed us, it is because they failed to notice our advertisements or to read the newspapers. When they come to beat us again we have our hearts hardened ready for them and pull this list of names with the amounts opposite. Oh, we are without heart or compassion or one drop of the milk of human kindness when it comes to such.

We have no definite rule in the matter of giving credit. We have prevented opening long accounts in many instances, or what promised to be long accounts, by giving freely the first prescriptions, but with the distinct understanding that we would open no account. But even that plan must be practiced with great discrimination.

BY CHARLES W. J. H. HAHN, ST. LOUIS, MO.

To be sure I send out monthly statements. On the bottom of each one is printed conspicuously, "Statements rendered monthly." If a customer feels insulted at this, he is not to be trusted.

As for our methods of following up accounts, a memorandum is made every time a statement is sent out. And when these memoranda total 3 or 4, we call the customer's attention to them and cut off his credit. If the bill is not paid, we are in the habit of sending the clerk or a collector to ask for the money. At times I have gone myself with good results.

LENIENT BUT CAUTIOUS.

Dead-beats are not allowed to get the best of us. I will trust any one the first time I am asked for credit. But I put the customer on his honor, asking him what day he will pay. If he pays as promised or makes a plausible excuse, he will get more credit. But again I ask him when he will pay. Memoranda of all promises are made, and if promises are not kept, the account is marked "No more credit." If a dead-beat moves away and we know

Chas. W. J. H. Hahn.

where to, we phone the druggist into whose neighborhood he moves.

The wage-earner or salaried man of $75 per month or less, pays his debts more quickly than the man with more salary. In apartment houses or among people who move often, the credit as a rule is poor.

KEEPING AT IT!

A letter and statement sent to the place of employment often brings good results. A threat of garnishment of wages is sometimes fruitful. If the man who owes you a bill avoids meeting you, or trades with your neighbors, he is not to be trusted.

Monthly statements with a reminder "Kindly remit" prevents a dead-beat from asking for more credit. If he has the gall to ask for more, you must show the same gall and refuse him.

Sometimes I put the question to a near relative of the debtor, "What's the matter with so and so? Is he hard up? Can't he pay his bills?" This has brought me a number of dollars.

BY J. ARTHUR BEAN, SOMERVILLE, MASS.

We send out monthly statements by mail to all who have had goods charged.

In following up accounts, we have sent one of the oldest clerks to pay a personal visit to

J. A. Bean.

the delinquent of long standing. But this is not required very often. I seldom go out myself. If the account is very old I hand it to a reliable collection agent who collects on a percentage basis.

We do not extend credit to any strangers unless they can prove they are worthy. If they are poor and need medicine, we give it to them. But these cases are rare in my locality. We simply do not give up any goods unless the cash is forthcoming, and that is the reason we have very few bad accounts on the books at the close of the year.

If a new customer moves into our district and wants credit, we ask for references. Then we inquire of the other merchants in our district and find whether the newcomer is all right. Until we are shown that he is, we keep him on a cash basis. Our reply is always, "We do only a cash business." For that reason we have very little credit business. We think after an experience of 15 years that it pays to keep near a cash basis. We have a number of customers to whom we extend a large credit, and we welcome their business as they are always good. But we have not many of these accounts.

I believe that the character of the locality determines in a measure whether one should extend credit to people.

BY JOHN M. LAUE, PORTLAND, OREGON.

The druggist who does a credit business—and nearly every druggist does—must have some method of making collections and preventing people from piling up bills which they never pay.

It is our regular practice to send out monthly statements or other reminders to our debtors.

We have other methods for following up book acounts vigorously. Personal interview three times per month with the delinquent represents one way.

If bills are not paid, I send the clerk first. If he is not successful, I go myself and get it.

As for preventing dead-beats from getting the best of us, we have been in business so long that we know whom to trust.

In general, in giving credit and making collections, to keep losses down to a minimum, I follow this method: I do not solicit a general credit business. This is very possible with us as our store is centrally located and has a large transient cash trade.

BY WM. O. FRAILEY, LANCASTER, PA.

I try to avoid the necessity of collections. I fight hard against credit sales. And as the average purchases in the drug store are small, I feel that it should be no hardship for people to pay cash. When I extend credit it is to

some one I am almost sure is good pay. In other cases conveying a hard-luck tale and no money, with a prescription to be filled, I look on the matter as a question of charity.

In spite of this attitude, however, we do some credit business. We do not have much trouble to collect our bills. Most of our credit customers are good paying people and we lose very little money and very few accounts by trusting people. We have no regular monthly system of sending bills or statements, as we should and would if we were doing much credit business. We do manage to send statements about every three months and we usually receive prompt response. It is very seldom necessary to dun people personally for their accounts.

I have adopted your system of accounting

Wm. O. Frailey.

as illustrated in the BULLETIN in the December issue, page 501. It is now in use in both of my stores. My inventories in both stores show up well, and I feel that I am now in pretty good shape.

The inventories developed that I have too little insurance, which I am correcting.

BY D. J. FINK, HOLDREGE, NEB.

Not to exceed 10 per cent of my business is credit. On the first of the year, I figured up my losses on book accounts for the past 15 years. They averaged $32 a year. This represents a very small loss in comparison to the business done.

I do not make it a practice to send out monthly statements or other reminders to creditors. I go out about every three months and give them to understand the reason I am out is because I need and want the money. I always do the collecting. I usually find that when I can't collect a bill, it is lost. The only

D. J. Fink.

thing to do in the case of dead-beats is to look them up as soon as they ask credit. If they are unworthy, cut them out while the account is small. This I do.

BY G. A. P. LICHTHARDT, SACRAMENTO, CAL.

It is my practice to send monthly statements on the first day of each month to regular credit customers who, as a rule, remit promptly. The small odds-and-ends bills are collected by one of the clerks. These accounts are seldom allowed to become more than a month old as it has been my experience that they are the hardest to collect. It is here that the greatest loss occurs, for the amounts are small and quickly forgotten. Or the people who owe them are of the roving type, who move from place to place and neglect to notify their creditors where they are going.

FINAL MEASURES.

If the bills are not paid after repeated efforts to collect them and no reasonable or legitimate excuse is given, they are sent to a professional bad-debt collector. Or if the account warrants it, suit is brought.

As an example, some years ago a man, who had been a credit customer and had paid promptly for two or three years, refused to pay for a 75-cent prescription which had been

filled for his wife; so after presenting this bill two or three times and having our collector told "Let Lichthardt send that bill to a bad-debt collector and pay 25-per-cent commission," suit was instituted promptly for the amount and costs. The result was that Mr. Man was out some eight or ten dollars instead of six bits.

INVESTIGATE NEWCOMERS.

We have made it a rule to extend no credit or open any new accounts unless by strict investigation we find the applicant to be worthy. Of course, once in a while we do fill prescriptions when we know that the people are in no position to pay for them. But this is seldom. Our store is no bureau of public comfort nor are we in the million-dollar class. We cannot take the place of the free dispensary run by the city and county of Sacramento.

Nevertheless this sort of business is bad and with all the care that one can take losses are bound to occur. The best way to keep these losses down is to be brave enough to say no. For let it be remembered that it is better to do a small cash business than it is to listen to the song of the siren of large credit and have your little ship of business wrecked upon the rocks of misplaced confidence.

"MY BEST PAYING SIDE-LINE."

The First Article in an Important Series by Different Druggists, in which Each Tells what Class of Goods has Paid Him Best—You'd Never Guess What the Particular Side-line was this Time, but it Brought in the Dollars!

By H. KALLIWODA.

A side-line, is it? Well, I guess I can give you one that will make you scratch your whiskers! It is clean and easy to handle—it requires no special training, and it pays a good profit.

This line is original with me, I believe. It has been ridiculed and sneered at, as original ideas most generally are, but it butters my bread, and pays better than stamps and "kill or cure" soap.

Hosiery! Whodathunkit? That's my line. It got its start by my keeping woolen socks for rheumatics and people with colds. But the madame wasn't benefited materially by this, so I immediately put in a full line of hose, woolen and cotton, for baby as well as for grandpa. It paid. I have a nice little trade, and I find it pays better than cigars.

Look and see the difference!

Cigars require a large investment, also care. Some get broken. Many are sold at 6, 7, and 8 for 25 cents, and many's the time I have to set 'em up to the boys.

On the other hand, socks require but a small investment, little care, never crack or break, and I never lose by a treat. They pay from 35 to 50 per cent and are no more foreign to drugs than are cigars, pencils, candy, etc. So there now!

10-cent hose cost 75 cents per dozen.
15-cent hose cost from $1.00 to $1.15 a dozen.
25-cent hose cost from $1.85 to $2.25 a dozen.
50-cent hose cost about $4.00 a dozen.

Once in a while I make so bold as to run a window. It always pays. I have a large ragdoll which I dress in a gown made entirely of socks. This is very easily done. A nice, white, baby's stocking makes a very nobby stocking-cap.

I bring my garden hose-reel down and place on it a placard, to wit:

WE SELL
HOSE.

Another placard reads:

MEND YOUR WAYS—
NOT YOUR SOCKS.
WE SELL SOCKS.

Get wise, Mr. Pill Man, and try it yourself!

How the Druggist's Sundries Are Made.

FIRST PAPER: CHAMOIS SKINS.

Sheep Instead of Chamois Furnish the Commercial Article Nowadays—How the Skins are Tanned and Cut—The Dyeing and Bleaching Processes—Different Grades on the Market—Display and Care of the Stock, and Other Points of Practical Interest.

By HENRY G. DRUEDING,
President of Drueding Brothers Company, Philadelphia.

In presenting this article I shall endeavor to place before your readers a short, intelligible treatise on chamois skins from an experience in their manufacture and sale reaching over twenty-five years.

The name "chamois skin" is misleading. It originates from the chamois animal, the zoological name being *Rupicapra tragus*. These animals, as is well known, inhabit the

Henry G. Drueding.

European Alps and Caucasus Mountains, and resemble a goat or deer. They are very shy and difficult to find. Hunters will follow them for days over dangerous mountain passes until they finally bring their prey to bay. .

THE CHAMOIS ANIMAL..

The animal is about the size of a goat or deer, of a dark chestnut-brown color, with the exception of the forehead, the sides of the lower joints and the muzzle, which are white. Its horns, rising above the eyes, are black, smooth and straight for two-thirds of their length, when they suddenly curve backward. Its hoofs are admirably adapted for taking advantage of roughnesses or projections on the mountain sides, or on glaciers. The hair is long, thick, and coarse. The illustration, I think, is a good representation of the animal.

The supply of skins from the chamois animal is, indeed, very limited. There would not be a sufficient quantity produced in five years to supply the demand for chamois skins for a single day.

I made inquiries during a recent visit to Switzerland about the probable annual crop of these skins, and learned that five thousand to six thousand skins are about an annual yield.

WHAT THE ACTUAL SKINS ARE.

What is known in the markets of the world as chamois skins is really an oil-tanned, sheepskin "flesher," or lining, as it is called in England.

The genuine chamois skin, when tanned in oil, is of a very soft and velvety texture, with a very thin epidermis or grain, which is readily removed by "buffing." The skin is also rather heavier than a sheep or lamb skin, which is usually employed for the manufacture of chamois. For all ordinary purposes, however, the oil-tanned sheep or lamb skin "flesher" is just as desirable as the genuine chamois skin.

To manufacture sheep or lamb skins into chamois leather, the first step necessary is to remove the wool, which is done by several methods. The one usually employed now is to paint the flesh side of the skin with a strong solution of sodium sulphite. This will loosen the wool in about twelve hours' time, so that it is easily removed either by pulling it off by hand, or by scraping with a dull instrument. The sodium sulphite is then washed out and the skin immersed in milk or lime to

swell it, and also to remove small particles of wool which still remain. The skin is then put on a beam and the legs and head cut off and otherwise trimmed to make it the proper shape. The head, legs and other trimmings are sold to the gluemaker for making glue. The beamsman also removes all the flesh left on the skin by the poor workmanship of the butcher. After this the hide is ready for the splitting machine.

HOW MADE.

I wish to explain here that what is known in the trade as chamois skin is really only half of the skin. The outside portion—*i.e.*, that part of the skin next to the wool, known as the grain side—is not suitable for chamois leather and is used for other purposes, mostly as pocketbook linings, hat linings, and book bindings.

In former times when skins were prepared for oil tannage, this part of the skin was cut away with a suitable knife and thus lost. To make chamois skins in this manner at the present time would mean at least double the price in the present market. At the present time the skin is cut through the center or split, thus producing two skins from one. The outside, that part of the skin next to the wool, is known as the grain side. The inside is called lining or flesher.

The splitting is accomplished mostly on machines especially constructed for this purpose. It consists of endless knives the edges of which are constantly grinding to keep them sharp, the skin being passed through rollers against the sharp edge of the knives. This machine requires delicate adjustment to produce good results.

THE TANNING PROCESS.

The lining or flesher is now ready for tanning. This is accomplished by sprinkling it with oil; codfish oil of good quality is usually employed. It is very important that this oil should be thoroughly incorporated into the skin. For this purpose a quantity of the skins are placed into what are known as fulling stocks, which twist and turn in every direction and distribute the oil evenly.

After sufficient milling the skins are partly dried and the process of sprinkling, milling and drying is repeated again and again until they are full of oil, and all the moisture is dried out. They are now allowed to hang long enough to oxidize the oil in the skin at a temperature of about one hundred degrees. The process after this is very simple. The oil is removed by pressure, a hydraulic process, and the remaining portions washed out by saponification with alkali. After this the skins are dried and are ready for finishing.

The oil which is removed from the skins by hydraulic pressure, also that portion of oil which is recovered by decomposing the soap solution with an acid and separating the oil, is used in the manufacture of other leathers, the object being to make the leather pliable, etc.

THE FINISHING.

The finishing is done mostly by pressing the skins against a revolving wheel covered with emery or flint. This removes all adhering substances and forms a finely finished surface.

We now have the finished chamois leather ready for the trimming and sorting room,

The real chamois animal—*Rupicapra tragus*—from which chamois skins are supposed to come.

where it is cut into suitable sizes and packed for the market.

Of late years trimmed skins—*i.e.*, skins of even sizes—are preferred by the trade. For this reason most manufacturers, at least most American manufacturers, cut the skins over a pattern so as to produce uniform sizes. In former years, when England and France supplied the United States market, the skins in the same package would vary in size and shape, thus lacking uniformity.

It is true by cutting uniform sizes there is necessarily some waste, but this is reduced to a minimum, when all pieces are again utilized by making watch bags and other small articles which find a ready sale.

USES OF CHAMOIS.

The principal uses for chamois skins are for

cleaning purposes. They will absorb moisture readily and give a high polish to glass, furniture, and other highly polished surfaces.

A good chamois skin can be used either wet or dry, and dry up soft when washed in soap and water.

Large quanitities of chamois skins are also used for chest protectors, chamois vests, and even underclothes are made out of them for cold climates. Chamois skins are also used in the manufacture of many leather goods, such as purses, etc. Ladies use them for fancy work.

Of late years there has been placed on the market quite a quantity of imitation chamois skins to be used for fancy work and other purposes where the skins are not to be washed. These skins are usually produced by tanning the skins in alum and coloring them to imitate the genuine chamois. This will produce a skin looking very much like a chamois and very often having a superior finish to an oil-tanned skin. Care, however, should be used in selling these skins for ordinary purposes for which chamois is used. They will dry up very hard and stiff when washed. In ordinary chamois skins the dealer should order oil-tanned chamois if he desires a skin that is washable.

DIFFERENT KINDS OF COLORS.

Chamois skins can be made in all colors. Formerly colors were mostly produced by applying to the surface of the skins different colored pigments, which adhere to the leather. This produces an unsatisfactory article, however, as it will always dust more or less.

Of late years, however, manufacturers have succeeded in producing fine colors with aniline, which is more satisfactory.

By incorporating a small quantity of ferric oxide, very finely powdered, an excellent polishing chamois is produced for silverware, etc.

A good quality of chamois skin is generally of a yellow or light-yellow color, which, when freshly cut, should show a dark-yellow color inside. This is a characteristic test of oil tannage. The absence of this color is generally an indication that the skin is tanned by a different method.

A good quality of oil-dressed chamois skin should also absorb moisture readily. This test is applied by allowing a few drops of water to fall upon the skin. It should absorb it speedily. If these drops roll about on the skin without absorption, it is almost a positive indication that it is not oil-tanned.

For some purposes a very light straw-colored chamois is demanded by the trade. These are produced by bleaching with sulphur. The skins, slightly damp, are hung in an air-tight room in which a small quantity of sulphur is burned, producing a light straw-colored product of bright color. It rather weakens the skin, however, and also incorporates some sulphur, which is objectionable when used in connection with silverware.

These bleached goods should not be used for wrapping silverware, as they are apt to tarnish it by producing sulphide.

The market affords a number of different brands of chamois skins. The principal ones are the American goods, the English and the French goods.

THE VARIOUS BRANDS.

The American grade of late years has largely crowded out the imported kind, and is even getting quite a foothold in Europe. Large quantities are now exported, principally to Germany, where they find a ready market. The English goods are generally of good quality and tannage. They come in both colors, yellow and white, the latter being produced by bleaching. They are trimmed and sorted mostly in irregular shapes and sizes; the French goods are mostly of a dark-yellow color, in large sizes. One variety, Bruts, are heavy skins finished on one side only. This is purposely done so that they absorb large quantities of water, thus making them suitable for stable work, automobile washing, etc.

Another variety of the French goods is the double dressed. They also come in large sizes only. They are very similar to the Bruts, with the difference that they are finished on both sides, making them thin like ordinary goods. In the last few years both these varieties, the Bruts and the double-dressed goods, have been produced in the United States in large quantities, and according to the writer's opinion they are equal, if not superior, to the French goods.

The manufacturer usually sorts these skins into three qualities, first quality, second quality, and third quality, and prices are regulated, of course, accordingly. The first quality should be free from stitches, soft and nearly perfect. The second quality consists of hides rejected from the firsts on account of too

much stitching, harsh spots, and other imperfections. The third quality again is composed of "rejects" from the second quality.

The drug trade, for the sake of retaining the public opinion that only the best quality of everything is obtainable in a drug store, should handle only the first quality of goods.

DISPLAYS.

Chamois skins are largely sold by the drug trade. Spring and fall are the best seasons to display them in the stores. A very attractive window display can be made with these goods. Care should be taken, however, when used for this purpose, not to expose to sunlight, as this will very quickly bleach them, and thus render them unsightly. This, however, does not cause the quality to deteriorate in any other way.

A glass case filled with these goods, placed so they can be seen, will keep them clean, and help to remind a woman when she enters the store that a chamois is needed in her household, and will assist materially to help sell the goods. Some druggists will keep them hidden in boxes or drawers, and produce them only when called for, with the inevitable result that their sales will be very limited.

THE CARE OF CHAMOIS.

A good quality of chamois skin when properly used should last a long time, and can, of course, be used wet as well as dry. It is important, however, that chamois be kept clean. If it is soiled, the best method of cleaning is by washing with soap and water. A liberal supply of soap is always beneficial to the skin that has been stained.

The best method to prevent shrinking is to rinse it in soap-suds before drying. When dry, rubbing and stretching will restore it to its former softness. A good chamois skin cannot be washed in boiling water, as a temperature above 130° or 140° will destroy the skin. The writer has seen skins that were returned to the seller, who in turn sent them back to the manufacturer, that were partly burned to charcoal, evidently caused by drying in strong heat, or by steeping in boiling water. The cause of this is easily seen, as chamois is a gelatinous substance, a sort of oleate of gelatin, and too much heat should be avoided.

HISTORY OF THE CHAMOIS INDUSTRY.

I may add that the manufacture of chamois skins in the United States has been attempted by various sheep leather factories for the past fifty or sixty years with varying success, always resulting in abandonment. The first successful attempt to manufacture this article in a large way in the United States was accomplished by Drueding Brothers of Philadelphia. It was only by persistent efforts that the various difficulties in producing a satisfactory article in competition with cheap foreign labor was accomplished.

The common American sheep, which now actually furnish the "chamois" skins of commerce.

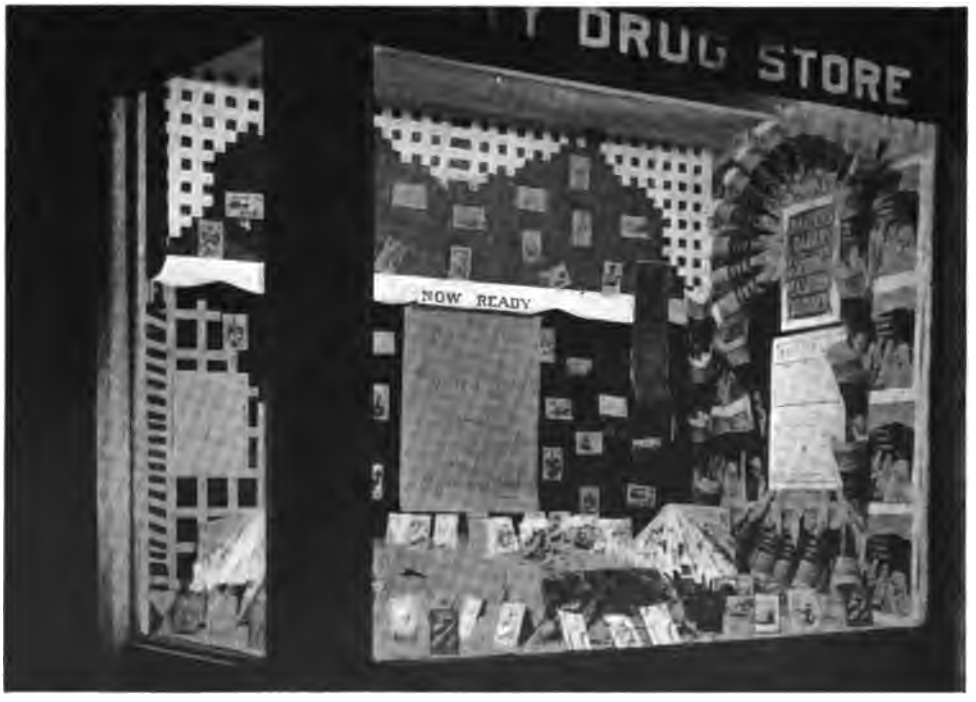
The duty on chamois skins has been only 20 per cent ad valorem for a number of years.

Prior to 1883 practically all the skins consumed in the United States were imported from England and France. At the present time the importation has dwindled to a very small proportion. It seems, however, that this industry is not widely distributed, there being at the present time only three factories in the United States producing chamois skins.

AN EASTER WINDOW.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Easter is essentially a display time—a season when people give more than usual attention to appearances. So when that holiday arrived last year, I thought I'd give my window a new dress. I arranged a background of red with an ingrain border top. The white latticework was made of heavy cardboard obtained from the printing office. I cut it out with a knife. The design is clearly shown in the illustration. Over the red background were arranged post-cards, while over the entire background I hung black cheese-cloth. I often use this where I wish to show articles without seriously obstructing the view of the interior.



The side wall bore a magazine trim which was intended to promote the sale of the Easter number of *Harper's Bazaar*. In the center was a raised surface formed by setting a heavy high box on the floor of the window and covering it with green, crumpled tissue-paper. Grouped on and around this elevation were post-cards that we had to offer the trade. They were held in place by wire holders. Sign cards told the prices. They were made of plain white wrapping paper, a departure from the stock usually employed for that purpose. Some of the best houses use this kind of paper as an advertising stunt.

The placard in the center of the window, not very well shown in the engraving, read as follows: "Look over our Easter cards. From 2 for 5 cents up to 10 cents each." The whole window presented a pretty appearance, as may be seen from the illustration. And we sold any number of holiday cards.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

(*Continued from February* BULLETIN.)

CHAPTER III.

PROFITABLE AND UNPROFITABLE EXPERIMENTS.

If a man never makes any mistakes, he never gets very far.

This is in part because a man who makes no mistakes of his own will never have the advantage of profiting by them nor will he

Snapshot of Mr. Farrington taken behind the prescription desk during the early years of his proprietorship of the store.

be disposed to profit by those of others; and in part because a man who always plays the game so carefully as never to err must necessarily be the kind who will be afraid to branch out and try new methods or seize new opportunities.

I made no end of mistakes and many of them could have been prevented by the exercise of a little foresight, but then it is easy enough after an experience is past to see how it might have been avoided.

TAKEN IN.

One day a man came along with a wagon load of bug-killer of some sort. He demonstrated to my satisfaction that it was the greatest thing ever invented for destroying all forms of insect life. It was put up in handy, squirt-top cans, and he said that if I would buy 3 cases at $4.00 a case he would give me the exclusive sale of the goods in my town.

I took the goods right off the wagon and gave him my check for the $12, and $12 did not grow on every bush in those days either.

He drove out of town, and before noon I discovered that he had sold the goods to one or more other dealers on the same street.

The check was on a bank in Walton, a near-by village. I telephoned and stopped payment. When the man reached that town, as he soon did, and presented the check for payment and it was refused, he simply went to the railway station and got a consignment of his goods that was waiting there, tendering my check in payment for the transportation charges. It was accepted, the difference paid to him, and he went away.

When the check turned up at the bank again in the hands of the express agent it was again refused, and he wrote me for payment. I refused and stated the situation. In due time his lawyer called upon me to accept the check and told me that inasmuch as it had come into the hands of an innocent party it would be up to me to pay it. I found that

*Copyright, 1912, by Frank Farrington.

this was true and I settled. That did not, however, make the bug-killer sell, and in the end I dumped it into the river.

So much for buying goods from an unknown dealer and paying for them before their quality was an assured fact. Such experiences certainly point the way to buying from the house with a reputation.

GETTING INTO THE SODA GAME.

It was about this time that I began to consider the soda fountain proposition.

My warmest competitor had practically the only real soda fountain in town at that time, and it worried me to see all of my customers dropping into his store all through the season to buy soda, and naturally other things as well. A live druggist will not accept such a situation calmly. He cannot afford to give his competitor a chance at his trade every day all summer long.

I began to investigate soda fountains. I

Part of the interior of the Farrington store when the business was young.

found that the good ones ran up into considerable money, much more than they did a few years later. Finally, however, I got track of a second-hand tile fountain of the counter sort. It had been used but one year and I bought it on the instalment plan from what was then the Low Art Tile Co. I paid $275 for it in easy (?) payments that ran on into the next winter. It was set up in April, and when ready to go stood me in about $500.

It was an attractive looking affair, really rather artistic, and it added to the appearance of the store. The counter part held ten bottles for the syrups and there were two mineral tubes and one soda draught-tube. The bottles set around the sides on a revolving nickel rack. The interior was filled with ice that melted so fast that you would have thought it was a fireless cooker.

Well, we finally got it ready to touch off. I sent out little opening invitations to the ladies of the town and enclosed with each one a newly minted five-cent piece. The invitations were well printed on good stock and read like this:

> AN INVITATION.
>
> We are starting our soda fountain.
> Will you come and help us?
> The five cent piece enclosed will buy you a glass of the best soda water you ever drank.
> Recognizing the importance of pleasing the feminine taste in such things, we take pleasure in asking you to be among the first of our critics.
>
> FARRINGTON'S DRUG STORE.

The people responded to this plan well and I can recommend it unqualifiedly. But they didn't seem to come more than once or twice. Of course there were a few people who repeated, but for the most part they all drifted back to the other store—and in the light of subsequent experience I can say that the soda water at that store was pretty bad. However, it was better than mine at first.

I had followed directions too closely in making up my syrups and they were too thin. They didn't have the flavor, and as soon as we had a few really hot days they would sour on the rack and in the cellar or anywhere else.

It didn't take me long to get wise, and I improved the goods until I knew we were drawing soda water as good as any one could under the circumstances. The business began to grow a little. We did a great many things to increase it.

Among other plans was one to enable us to take out ice-cold glasses in which to serve the soda. I remembered getting a glass of someing or other at a fountain in Lowell, Mass., once upon a time when the glass was so cold that I couldn't hold it in my hand or drink it either. I wanted to hand them out like that.

I had the boy build a box to fit under the counter. He made the walls double with paper between, and we put the glasses in the top and ice in the bottom and waited for the former to cool. But they came out about as warm as they went in, until I happened to think that cold air falls instead of rising, and put the ice at the top. Then we got results.

Ours was a very poor soda-water town, and our location was on the hot side of the street at the time of day when most of the people came out. We had not room for anything more than uncomfortable stools, and I was somewhat handicapped.

I started ice-cream soda at 10 cents, but a third fountain starting up made it necessary to cut the price to 5 cents to meet the rest. However, I maintained the quality, and the fountain began to do us some good in the way of getting new customers and holding the old ones. It was a good thing for the store aside from its own advantages as a money-maker, the latter being rather questionable.

We had some difficulty in keeping the class of soda trade down to a desirable element. There was a tendency on the part of some of the boys to try to "rough-house" the place once in a while. It was just a case of youngsters out to have a good time, but the best class of trade is easily driven away by anything of that sort, and we were called upon to exercise all the tact available to keep matters properly adjusted. On one occasion a young fellow came in with a rush, slammed himself down on one of the stools, and taking hold of the rack full of bottles, gave it such a whirl that half the bottles flew off at a tangent and distributed broken glass and syrups all over the floor and counters.

After two years of soda-water trade, I decided to find out just how much money it was making for me. The third year I kept track of every outgoing and incoming penny connected with it.

When I closed up the season (which I will admit had been a very cool one even for our climate) I found that my net profit on the soda business amounted to exactly nine cents!

OUT WENT THE FOUNTAIN!

It did not take me fifteen minutes to decide what to do. I was getting a good deal better trade by then. My sales that year were $9000, and I said to myself, "I can afford to get along without that fountain. If it could be made to do business enough to pay for one man's time on it, I'd keep it. It can't though, so out she goes. I'll bear on hard on some other things to take its place in getting people into the store, and as for the nine cents profit, I'll make that up on the first prescription that comes in."

I sold the fountain for $75, all but the three ten-gallon tanks, and those I sold for $50. If I were to-day running a drug store with a view to making it develop all the business possible, I would have as good a soda fountain in it as I could afford, and I would make it pay me more than nine cents a year too.

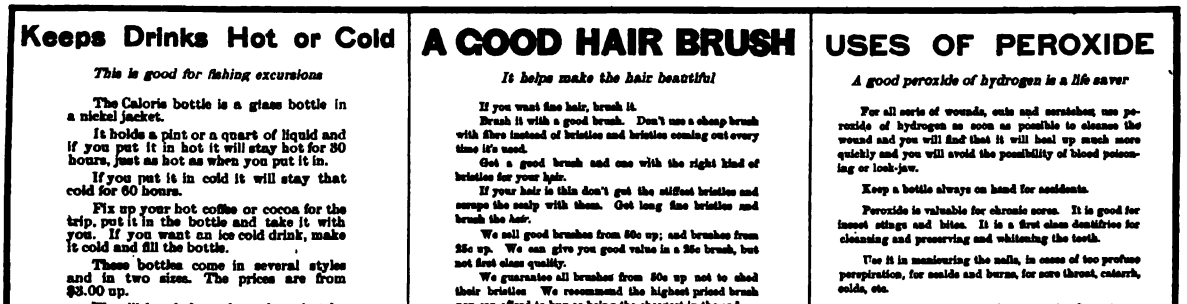
With that $125 I bought three floor showcases for one side of the store, two 8-ft. cases, and one 5-ft. cigar case. These were ahead of any in town and gave the store an appearance which, together with a complete redecorating, made things look prosperous and showed the goods and sold them.

OTHER VENTURES.

With post-cards coming strongly into use at that time I made a big effort to get high-class view cards, and I sold everything for one cent. This brought in more people than the soda fountain ever did, and in spite of the one-cent rate for cards, some of which cost as high as $2.50 per 100, it paid a good net profit.

With a new cigar case I decided also to go after the cigar trade, as we had not been getting our share of it.

I began by closing out at any price such



Some of Mr. Farrington's newspaper ads. used about the time described in the present installment of his autobiography.

brands as were not desirable because of quality or unsalability. Then I put in a number of well-known brands and a few new ones of which I secured the exclusive sale.

I did not try to advertise these goods in the newspapers much. It wastes a good deal of circulation to advertise cigars in the newspaper for a retail drug store. The paper charges a rate in accordance with its whole circulation, and only a small proportion of it is made up of smokers.

One successful little cigar introducing plan was the following:

By using a lineograph to reproduce handwriting in duplicate I sent to a list of the local smokers a series of communications. The first was a postal card reading simply, in the best imitation I could make of feminine chirography, "Come and find your Sally." This was followed a few days later by another reading, "I'm waiting for you. (signed) Sally." The last of the series was on delicate note paper in a very feminine looking envelope and on the first page it read:

> I've sent you two postals and I haven't seen you yet. Aren't you a little slow? If you should ever see me you'd be mighty fond of me in a short time.
>
> I'm waiting for you at Farrington's Drug Store. Ask the man there for me.
>
> Yours,
>
> SALLY WARD.
>
> [OVER]

On the next page was an imprint with a rubber stamp, "Sally Ward, the best 5-cent cigar, 6 for 25 cents."

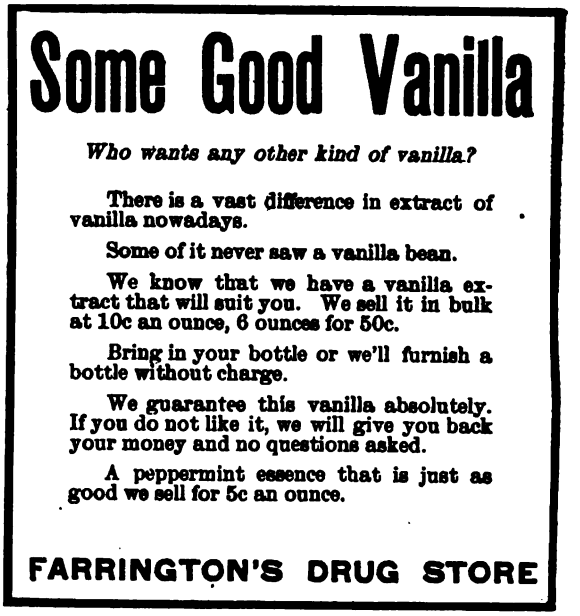
There were one or two men who said that their wives were inclined to make a fuss over the first two communications, but no divorces resulted and the cigar had a good sale.

INTERESTING THE SCHOOLCHILDREN.

Other schemes that I used at this time for interesting the schoolchildren in the store were prize plans. In one of them I sent out to all families having children of school age small blotters with an outlined picture on the back, and I offered prizes for the best returned blotters with the pictures colored up with crayons. In another plan I offered a series of 25 prizes, the last 15 of which were only 5-cent tablets, for the best description by a student, of the happenings of a day at school. The only condition was that the matter be written on 8 by 10 inch paper, and in parentheses it was stated that we sold such paper in 5- and 10-cent tablets.

Both of these competitions brought in a great many entries and they started the schoolchildren coming our way.

The advertisements reproduced in connection with this chapter show the style that I was following at this time with 5-inch double-column space. These ads. were very widely read, and they certainly produced results. I secured a prominent position in the local weekly papers and paid about nine cents an inch.



Another one of Mr. Farrington's newspaper ads.

Once in a while I ran something very different in the way of copy. In advertising candy one time I used the following. Candy advertising in the newspaper must be very catchy in order to get much attention:

> Once upon a Time there was a young Fellow and He lived in a Town about like Delhi. There were Many young Fellows in the Town, and They had a Way of giving the Girls a pretty good Time. But hard Times came and Cash was scarce. So this young Fellow thought He would save Money by giving the Girls Candy that cost Less. He bought the Kind that is all fancy Box. It looked Great on the Outside. He gave all the Girls a Box. He thought he would be Popular. The Girls all said "Oh my!" when They saw it, but when They ate it They said "Oh Me!" It tasted something Fierce. When this young Fellow came again he got the Frosty Mitt (whatever That may be), and He found the Girls starting out skating with the other Boys. He had saved a few Cents on the Candy, but He had lost his Prestige, and That is a bad Thing to lose. He felt all Cut up. He thought it

over, then He borrowed some Cash and bought each Girl a box of Huyler's and had Them sent around to their Houses. After a few Days he went to call, and instead of the Frosty Mitt, he received the Glad Hand "and then Some," and now He has Prestige enough to fill a Barn. Moral: Get the best. Get Huyler's. Get it at

FARRINGTON'S DRUG STORE.

In the next chapter I am going to tell all about the advertising I used at one time and another to get business for special days and occasions, like Christmas, New Years, Easter, etc., etc.

All such days or events bring chances for increased sales, and the reason more druggists do not get their share of the extra business is simply because they do not go after it.

With better sales and more money and better help in the store I was able to do better advertising. Of course I could not give the customers the personal attention they got in the earlier days, but I never did believe in cheap help and I preferred to pay good wages for a good man rather than take a poor man or boy at any figure.

(*To be continued in April.*)

A NEWS BULLETIN BOARD IN FRONT OF THE STORE.

Brenan & Wilson, of Cambridge, Ohio, Obtain Telegraphic Press Reports Four Times a Day and Feature Them on the Sidewalk—Store Ads. are Worked in, Too, and the Scheme Has Proved a Remarkable Success.

By SAMUEL SCHLUP, Ph.G.

I have read for a number of years the interesting articles in the BULLETIN under the head of "My Best Advertising Scheme." Let me tell you of a scheme we have been using for

Samuel Schlup.

the past six months and which has brought good results as a live one!

We have arrangements made with the leading daily newspaper of the city by which it supplies us with large news bulletin blanks bearing its title on top—"The Jeffersonian Bulletin." At four different periods of the day this paper receives wire news from the United Press system. These they 'phone us in brief form and we immediately place them on the bulletin board in front of the store. Thus we supply the people with the latest, livest and best news service of the city.

AN ATTRACTIVE AD.

This attracts wide-spread interest and attention and is one of the most popular and sought after things by the people whenever they are up town. They learn to call the store by 'phone asking about the returns of an election, the results of a ball game, or the truth about a local story which has broken loose. It has become so popular that any one hearing a piece of news will 'phone the store so that it can be placed on the bulletin board. In this manner our telephone number is remembered by the majority of the people. Many traveling men that "make" the store are so interested in this form of advertising and its complete success that if they hear any news of interest while on their route, they 'phone or wire us at once.

Directly below the news itself on the bulletin, and without any space between, we always have what we call a store bulletin with the headline, "Brenan & Wilson's Special Bul-

letin." On this we use clippings from late magazine advertisements of the drugs and sundries which we carry in stock, and straight "dope" to the people of what is doing in the store. We try to make our ads. "carry" to the minds of readers so they will not be forgotten, and we draw them up in a catchy manner so as to make them amusing and pleasing. For example, when the show "Alma, Where Do You Live?" visited our city we used the following on the bulletin board:

> BULLETIN.
>
> Alma, Where Do You Live? He Wants To Send You a Box of Liggett's Chocolates.

Many merchants in other lines, as well as the local theater managers, have tried to buy this space below the regular news bulletin, but it is not for sale.

Seasonable drugs are mentioned on this space each day, as well as new drugs and sundries which we get in stock or wish to push. At certain times during the day, the street in front of the bulletin board becomes almost blockaded. People say, "Well, let's see what's on the bulletin."

Since the installation of the bulletin, we find that it has done more good than newspaper ads. or house-to-house distribution. It puts the article before the people right at the place where they can procure it, and that is what brings results!

"MY MOST EXCITING EXPERIENCE."

Dispensing Oxalic Acid Instead of Boric—Severe Burns from Nitric Acid Narrowly Averted —Misunderstanding a Foreigner Proves Embarrassing—Several Attempts at Suicide— One Man Swallows an Ounce of Veronal, Another Takes Arsenic, while a Third Fellow Drinks Laudanum—Some Very Trying Situations for a Druggist.

A CASE OF MISTAKEN IDENTITY.

By Frank Glando, Oakland, Cal.

The following story will demonstrate how near I came to getting into trouble, and goes to show that there is a God, too, for drug clerks. It also proves the strict necessity of always looking twice at the labels of bottles and the jars of drugs used.

A long time ago I had occasion to make a gallon of boric acid solution, which we always keep on hand. So I got the jar of boric acid crystals, and was cocksure I had it. Being quite familiar with the store, I merely glanced sideways at the jar, and noticing the word acid, weighed out 6 ounces of the crystals, which superficially looked about the same as boric acid. I placed the salt in an enamel saucepan with water, boiled it, and filtered the solution into a gallon bottle.

The next day I had occasion to use the pan for an infusion. To my great surprise I noticed that the enamel inside was practically all corroded. The bottom was burned out, exposing the iron.

Suddenly a thought flashed to my mind. I ran to see the stock jar of what I had used, and to my great astonishment I found out I had made a solution of oxalic instead of boric acid.

I reached for the gallon bottle of the solution I had made. Here again I was terrified to see about a pint of the solution gone. You can imagine how I felt. My hair stood up straight. I had cold and hot perspiration alternately, and my legs felt as if I had run a marathon race. I had visions of some poor devil washing his eyes with oxalic acid solution, and was thinking how soon it would be before I would be working in the jute mill. Anyway, it was time for action.

I dumped out the oxalic solution into the sink and immediately made a gallon of boric acid solution. This time I looked at the label three times, and then looked at it again. Next I telephoned to the other clerk who had the night shift, as I thought nobody but him had dispensed the solution. I found that he had filled a prescription from Dr. B., an eye spe-

cialist, together with some eye drops for a Mr. A. The medicines, he said, were all ready and wrapped up and paid for, but the customer would not call till the following evening. The package, he added, lay in the corner of a showcase.

Well, you should have heard the yell I let out as I hung up the receiver. I made for that package in a hustle and changed the bottle. Maybe I wasn't happy! Believe me, "never again."

I may add, however, that I would never have made such a blunder if the apprentice in the store had not changed the stock bottles of these acids while he was cleaning them.

But always look again, anyhow!

AN OUNCE OF VERONAL PROVES FATAL.

By W. A. L. Williams, Adelaide, South Australia.

This experience may not appear so appalling in cold type, but I assure you it was exciting to me.

About ten o'clock one morning, a man walked into the shop and asked for a hypodermic tablet of morphine, ¼ grain, for sleeplessness. I refused. Then he asked for veronal, saying he had used it before. I complied, and as he said he was traveling, handed him an original ounce packet. He also asked for something for his nerves. I gave him a bromide mixture.

The next morning I was called in to interview a constable, who, after carefully unwrapping a parcel, produced my bottle and the empty veronal packet. There was nothing to do but admit the sale. Then I was informed that my customer was lying dead in a certain coffee palace.

These words cannot describe my feelings. I managed to secure a portion of the medicine which still remained, and after a rapid analysis assured myself there was not a mistake in the mixture. I was then conducted to the coffee palace to view the deceased, who was still lying partly dressed on his bed. I did not derive an immense amount of pleasure from that, however. Then followed a summons and the inquest, during which I was cross-examined as to contents of the bottle and various details of the sale, the questions not conducing to a very happy frame of mind for the witness. It transpired that the man had taken the whole ounce of veronal at a dose, and death was due to poisoning by the drug.

Requests for veronal I now treat with the strictest caution.

A WHARF LABORER SWALLOWS ARSENIC.

By Charles Palliser, Wellington, N. Z.

Over a year ago I had a very lively time. It was just after midday. Several workmen were passing homewards, the neighboring schools were just out and the children were going by in groups. A man came in and asked for some arsenic, saying he wanted to kill some cats. We offered to let him have Prussic acid, but he demanded arsenic. He brought a witness with him, and the pair signed the necessary poison-sale sheet. On handing him the arsenic, which we had dispensed in two cachets of 10 grains each, I was astonished to see him deliberately put one into his mouth and swallow it.

In less time than it takes to write it an emetic was administered. A group quickly gathered at seeing me struggling with the big, burly wharf laborer. Among the interested spectators appeared a medical man, who then took charge of the case and sent the patient off to the hospital. Police authorities were in for statements in case of death, but it happened none were necessary. By the free use of a stomach pump the man regained consciousness that evening.

I have sold arsenic since then, but always take any amount of precautions!

A WOULD-BE SUICIDE.

By S. L. McDowell, Camden, Alabama.

About six months ago I came into the store after dinner and started to straighten up things. In a few minutes Dr. Bonner, the proprietor, entered and told me that he was going down the street a few minutes, and if anybody wanted him to let him know.

Just after he left, a man, who was somewhat drunk, came in and said: "Say, son, have you any laudanum?" "Yes," said I. "Let me have a ten-cent bottle, and pull the stopper out so that I can take a dose."

I did as he asked me, and when I handed him the bottle he put it to his mouth and

drank the whole contents. "Are you crazy?" I cried, "or are you trying to commit suicide?" He said it would not hurt him in the least. He also told me that he was feeling badly and was going back to the hotel, a quarter of a mile from our store, to retire.

About five minutes after he reached the hotel, our telephone bell gave a quick, loud ring. I put the receiver to my ear, but before I could say hello a boy at the hotel asked me whether Dr. Bonner was in. I said no, but added that I could get him in a minute if he wanted him. Then he told me to tell him to come to the hotel at once as a man was up there about to die.

I closed the store and ran down the street as hard as I could to get Dr. Bonner. When I told him who wanted him and what he had drunk, he grabbed his saddlebags, jumped on his horse, and hurried to the hotel just as fast as he could.

I closed up the store and hastened to the hotel also. I got there in time to help Dr. Bonner some. After a great deal of work we brought Mr. Blank to, the very man who had drunk the laudanum.

A MISHAP WITH NITRIC ACID.

By John A. Kennedy, Ridgetown, Ontario.

Recently an accident happened which I am not likely to forget.

It was late on Saturday night, and since only a few customers were dropping in, the boss took advantage of this to slip out for a few minutes. During his absence a man, a stranger to me, came in and asked for half an ounce of nitric acid and handed me a bottle to put it in.

He was a man who seemed to know more or less about drugs, and was going to use this acid to make up an ointment which appeared to me would be quite similar to citrine ointment. Judging from what he said, it would cure nearly everything on earth where an ointment could be applied, from sore eyes to a bog spavin.

I filled his bottle, and after corking it well commenced removing the acid-eaten label with my jack-knife to replace it with a new one. While I was scratching away, and at the same time talking to my customer, the bottle broke, and the contents were thrown in my face, particularly in one eye. I had had a bottle break in my hands before while putting in the cork, but this was entirely new to me.

In about five seconds, if I remember right, many things flashed through my mind, and I must acknowledge I never used my brain so quickly in all my life as I did then. Books with all their instruction as how to counteract an acid were of no value to me. It was up to me to think. The lime-water bottle was a little ways from me, and the contents of this I poured into my eye, never for once thinking of the cost of the article, until I didn't know which hurt the most, the lime-water or the acid.

Then I put aqua ammonia on my face until the fumes nearly suffocated me, as I thought this would be the better of the two; but I didn't dare to put it in my eye. It did the work well. Although I had a bad looking eye and a slightly burnt face, I came out fine with the advice of the doctor later.

Everything is well that ends well, but the proverb is of little encouragement to an imperiled man who doesn't know how things are likely to end. I would rather not go through the same experience again.

HAIR TONIC FOR THE NERVES.

By C. H. Monahan, New Rochelle, N. Y.

A girl came into the store in which I am employed and obtained a bottle of toilet water. She also asked me for a good tonic for her head. She could not talk good English, being a foreigner, so she pointed to the top of her head and put her hand on it, and I thought she wanted a good hair tonic.

I tried to explain to her how to use it and gave it to her with much satisfaction, thinking nothing more about it until the next day, when her madam called up on the telephone and said the girl wanted a good tonic for her nerves and had taken a large tablespoonful of the hair tonic I had given her.

As the preparation was of a proprietary nature, I did not know what to give as an antidote, so I told her to ask the girl whether she felt any bad effects. She said no; so I told her I guessed it would cure her nerves all right, but advised that she take no more of it.

DOLLAR IDEAS

A DEVICE FOR HANDLING BARRELS.

J. C. Reese, Newton, Kansas: The accompanying etchings illustrate a very useful home-made device to be used for raising a heavy barrel and keeping it elevated sufficiently to allow a gallon measure to be inserted under the faucet. I have used several of the lifters for some time and would not be without them. The measurements are as follows:

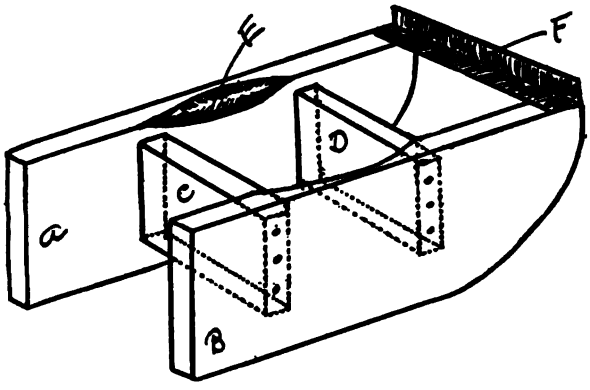


PLATE 1

This etching shows the construction of the lifter.

Rockers A and B are 2 by 12 by 33 inches.

Cross-beams C and D are 2 by 8 by 13¾ inches.

Cavity E is a hollow place cut out to fit the barrel.

Projection F is a heavy piece of iron bent at right angles. It is 2 inches wide where the screws go through and 3 inches high.

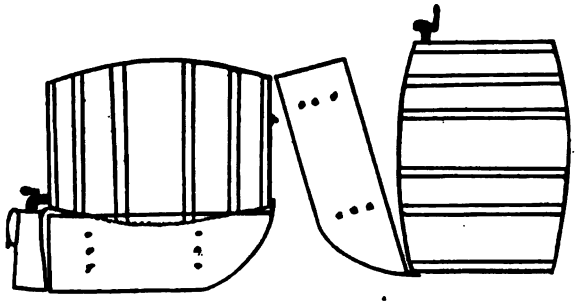


PLATE 2.

On the right will be seen the lifter in action; on the left, at rest.

Plate No. 2 shows the method of raising the barrel and the position after it is raised. To lower the barrel on to the "sled," the man stands facing the faucet with the lifter directly in front of him, the right hand on the faucet and the left hand on the raiser. He inserts the flange under the barrel and pulls with the right hand. The barrel tips easily.

A QUICK METHOD OF MAKING ELIXIR OF TERPIN HYDRATE.

J. C. Arthur St. James, Fort Morgan, Colo.: Having occasional orders for elixir of terpin hydrate and heroin N. F. in gallon quantities, I always found dissolving the terpin hydrate in the alcohol a very slow process, tables of solubility to the contrary notwithstanding.

At first it was found that heating the alcohol and the terpin hydrate in a flask was quicker. But this was more or less dangerous, besides entailing waste of alcohol. So it occurred to me to take advantage of the low melting point of terpin hydrate, by dissolving it in hot glycerin. The idea worked better than expected. I now take about one-fourth of the amount of glycerin, heat it in a shallow dish to about 100° C., then quickly stir in the terpin hydrate, which dissolves at once. The balance of the glycerin is added, which, though cold, does not cause the least separation. The alcohol and other ingredients are then added in accordance with the formula. The entire operation, apart from heating the glycerin, does not take five minutes.

I make one change also in the official proportions. I use exactly equal parts of alcohol and glycerin and have found that in the coldest weather not the least separation of terpin hydrate takes place. It is best to specify *powdered* terpin hydrate, which comes in a fluffy, light form, in preference to the crystals usually sent. The powder dissolves much more quickly. This suggestion of course applies to all of the N. F. elixirs of terpin hydrate.

FILLING NARROW-NECKED BOTTLES IN THE COLD.

Nicholas Fox, Ph.C., Spalding, Nebraska: In filling narrow-necked bottles in cold weather with a heavy, thick liquid, the neck of the bottle has a tendency to close, causing waste and loss of time. This trouble can easily be prevented by holding the neck of the bottle to be filled in the flame of an alcohol lamp for a short time. Don't use a match. It smokes the bottle.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THREE USEFUL SUGGESTIONS.

To the Editors:

I am not going to tire you by offering a new way of preparing salvarsan solution. But the suggestion I am presenting may be the means of saving some one money and annoyance.

LOOK OUT FOR TROUBLE WITH SALVARSAN!

On page 38 in the advertising section of the BULLETIN OF PHARMACY for December appears a warning, "Goods offered from Canada or England are not licensed for resale in the United States." Some dispensers do not pay enough attention to little things, and do not know whether their jobbers are supplying salvarsan obtained from Victor Koechl & Co. with their label and guarantee.

Lately there have been many complaints and requests for refunds on salvarsan, the product yielding a green solution under the most aseptic conditions. Knowing that the product is faulty, you are surely unable to take issue with the physician. This is why you should test the product before it goes out.

After the faulty product has left your store, the chances are that you will encounter some inconveniences and delays before you will be reimbursed. You will need to seek a letter from the busy physician and from the wholesalers. After all, suppose your product was not legitimate? Do you not think this a much easier and wiser course, namely, when you receive your tubes from the jobber to dip them in a solution of 1 to 1000 or 1 to 2000 mercuric chloride? Then by a close examination you will be able to see whether the tubes are defective. Flaws are indicated by the appearance of the greenish-yellow coloration around those unaccountable, pernicious and very minute perforations which have proved one source of my trouble. By returning such tubes to the jobber immediately trouble is prevented.

AS TO CHEWING GUM.

Nearly every one has a fad of some kind. Mine seems to be that of noticing little things too frequently overlooked. I have been very much impressed by the amount of chewing gum sold at the cashier's stand in restaurants and at soda fountains by merely breaking the packages into individually wrapped pieces and displaying them in a large bowl with a neatly lettered card: "One cent apiece." As the bowl is under the observation of the cashier, many steps are saved others. At the same time it affords an effective way of collecting pennies, and in the case of stores serves as a means of catching the odd cents returned to the customer in change.

IMPROVISED VACCINATION SHIELDS.

The thick, square, aseptic bunion pads will serve for vaccination shields, answering the purpose admirably. Furthermore, they are very economical, especially in large, poor families, and when the physician does the work at his own expense. JOSEPH HART.

Portland, Oregon.

CATCHING AN OVERDOSE OF DIGITALIS.

To the Editors:

This incident being extremely unique, and my feelings somewhat aroused thereby, I thought I would give vent to the resentment that rages within me every time I think of the subject by writing you.

A few days ago we received the following prescription from a physician who makes the treatment of foot troubles his specialty:

Potassium citrate.....5 drachms.
Potassium acetate .....5 drachms.
Sodium phosphate .....5 drachms.
Tincture of hyoscyamus.....2 drachms.
Fluidextract of digitalis,
Fluidextract of uva ursi, āā q. s.
to make.....4 ounces.

Sig.: 1 drachm every three hours.

The physician was called upon the phone, and the following dialogue between him and me took place:

"Hello, Doctor, we have one of your prescriptions calling for fluidextract of digitalis. I was taught that the average dose of fluidextract of digitalis was only one single minim."

To which he relied, "Are you sure? I think you are mistaken."

"Pardon me, Doctor, perhaps you refer to the infusion of digitalis. That can be administered in two-drachm doses."

"Oh, well, then. Thank you. Put that in instead."

This goes to show that physicians should leave dispensing to those who are most capable and fitted to do that special work. If this doctor did his own dispensing, and did not have a pharmacist to act as his safety brake, his patient would now be crossing the River Jordan. SAMUEL H. FRITZ, Ph.G.

Cleveland, Ohio.

HOW HE LOOKS!

To the Editors:

The enclosed picture will show you how we look when reading the BULLETIN OF PHARMACY—a journal which we enjoy very much. This shows the prescription clerk, Mr. Frank

Blakely, taking his monthly intellectual diversion at the desk back in the prescription department. SAM H. ZIMMERMAN.

Lodi, Cal.

APERIENT WATER IN THE WINDOW.

To the Editors:

Maybe you can use the following to help out some other drug clerk who is "up against it" when he wants something that will attract the people's attention and open their purses. It worked fine for me.

First I filled the bottom of my window about one inch deep with dirt out of our back yard. I made two mounds in the center to represent two graves. I used heavy white cardboard to represent the headstones and printed thereon:

MARY
beloved wife
of
JOHN SMITH
Born Feb. 30, 1820.
Died April 31, 1891.
Here lies me and my daughter,
Never heard of Pluto Water,
So we stuck to Epsom Salts
And here we lie in these cold vaults.

SUSAN
daughter
of
MARY and JOHN SMITH
Born Sept. 31, 1857.
Died Feb. 29, 1891.
Rest in Peace.

A small display of Pluto Water appeared in the two back corners with price tag.

This display sold Pluto Water, and that window was the talk of the town for a month after I changed it. Even a year later people still mention it when they buy Pluto—say they want "the kind that keeps them out of the graveyard."

I always watch for the BULLETIN, because I always find something new that helps me out every month. C. E. PETTYJOHN, Ph.G.

Farmington, Ill.

DEALING WITH INSURANCE ADJUSTERS.

To the Editors:

The adjustment of insurance following the recent drug-store fires in North Dakota made it plain to me that the average country druggist is not very well equipped to deal with the insurance adjuster in such matters.

It seems to be the common error of the druggist who loses his stock by fire, when asked about his gross profits, to name altogether too low a figure. Consequently he does not get sufficient pay for the amount of stock lost. In this connection I might give you a plan which I have suggested to one or two of my customers who have recently started in business, namely, that on each Saturday they keep a record of every article sold with the cost and selling price in order to establish a basis from which to figure.

Of course, this will be of very little inter-

est to the larger firms who keep a complete set of books, but it is a fact that a great majority of the country druggists do not keep a set of books that will furnish any information in a case of this kind. I simply offer this as a suggestion. P. M. GRICE.

Fargo, N. D.

A HUNTING TROPHY.

To the Editors:

I am sending you a snapshot showing the trophy of my 1911 moose hunting trip. This is one of the handsomest heads I ever saw, although not at all in the "record class" for spread, which is 42½ inches. But the blades are turned up very sharply with a very handsome curve, 18 points, pan 11½ inches wide. The scalp is the blackest I ever saw, and the antlers are of a dark mahogany hue. Altogether it is simply a beauty, and I am very

proud of it, although it is only one of quite a number I have shot. But it is the *best,* probably the best I will ever get a shot at. I thought some of the BULLETIN readers might care to see how a knight of the mortar spends his holidays. I'm quite as handy with the rifle as with the pestle.

The photograph reproduced in the illustration is amateur work and is done with a camera which is part of my woods equipment.

Bridgetown, N. S. W. A. WARREN.

DESCRIBING A DRUG-STORE DOG.

To the Editors:

Down in this neck of the woods the other day a little girl saw a Dachshund in a drug store. She had never seen this particular variety of the dog species before, and she was very much astonished and captivated by it. Returning home she began to relate her experience with a good deal of enthusiasm to her mother. The mother didn't get a very clear idea at first of what sort of a dog her little daughter had seen, and she asked her how big it was. "Why, mama," said the youngster, after hesitating a moment to clarify her thoughts, "it was just about two dogs long and half a dog high!" W. N. THAYER.

Brooklyn, N. Y.

SIMPLE METHOD OF MAKING PRICE CARDS.

To the Editors:

Here is an idea which has saved me quite a little money and time. For making price tags I use a calendar, preferably one with large figures for each date. Instead of throwing such calendars away, I save them, and with a piece of carbon paper trace the figures on cardboard, then fill in with outlines with any color of ink I may desire. Any one who can't print will find this simple device quite useful.

These price cards play quite an important part in the window and may be used on post-card racks. LUTHER E. MCNEILL.

Wilmington, Del.

WHAT WOULD YOU CHARGE?

To the Editors:

What would be charged for the following prescription according to the N. A. R. D. price system?

Strychnine sulphate	¼ grain.
Extract of aloin	8 grains.
Extract of belladonna	6 grains.
Extract of cascara	24 grains.

Make 48 pills. FORD.

[NOTE BY THE EDITORS.—It may be interesting to have our readers say what price they think ought to be made on this prescription. Let us hear from you.]

WE ARE QUITE ENCOURAGED!

To the Editors:

I read your editorial in the January BULLETIN on "None so blind as those who won't see," and, as they say, it struck me in the right place. I have decided to close at 8 o'clock in the evening as soon as the post-office closes—for it is here in the store. As to Sunday clos-

ing, I have not yet figured out a plan, but think I shall close from 9 to 12 A.M. and from 5 to 9 P.M.

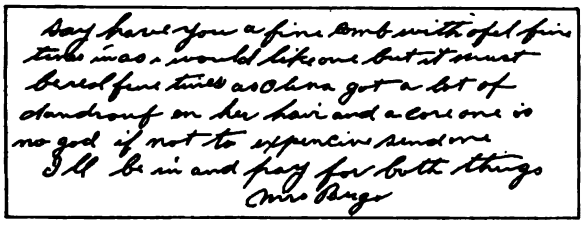
You may think that your everlasting hammering on the subject of shorter hours is all in vain, but it's not so. Keep the good work up.

Chouteau, Montana. R. R. MELTON.

SHE WANTED IT FINE!

To the Editors:

The attached order deserves reproduction in



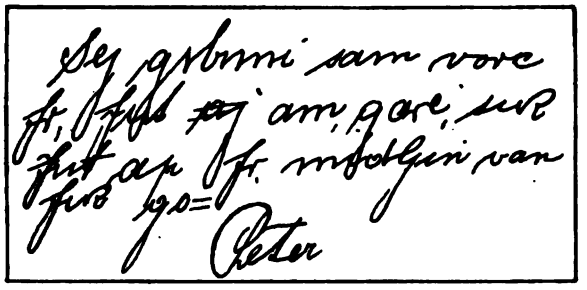
your collection of freaks. Did she get what she wanted? Most assuredly!

White Rock, South Dakota. GEORGE WINANS.

A STIFF ONE!

To the Editors:

I am sending you an original note received



the other day. I would like to have your readers decipher it. It certainly is a corker!

Steelton, Pa. T. PROWELL.

THE FINISHING TOUCH!

To the Editors:

We find the BULLETIN full of profitable suggestions as well as more or less humorous articles. The illustrated descriptions of various drug stores over the world are also very interesting to the busy druggist who hasn't the time and usually not the means to indulge in the travel necessary to visit the scenes in person. Altogether we would feel that our drug store was not complete without the monthly visit of the BULLETIN!

Santa Rosa, Cal. THE HAHMAN DRUG CO.

FLORAL DEPARTMENT.

I had rather miss a picnic, a nice banquet, or almost anything else than to miss a single copy of the BULLETIN—a journal that is unique among all pharmaceutical periodicals because it is interesting and instructive throughout from cover to cover.

Dallas, Texas. CORNELIUS BEUKMA.

I like the BULLETIN for many reasons. Its large type, the good quality of the paper, and the clear illustrations all appeal to the eyes of one who in his 78th year and 59th in the drug business does not see as clearly as he once did.

Bellefonte, Pa. F. POTTS GREEN.

I have not as yet received the last number, and do not want to miss it, as I am making a file for the last ten years and would not be without a single issue. The BULLETIN is the best made—sure! L. F. BRIGNAC.

Ruston, La.

I am having my eighth volume bound now, and I have always found the journal full of meat from cover to cover.

St. Paul, Minn. RICHARD J. MESSING.

I like your magazine the best because it always has something of interest to the small man in the small town. CHAS. G. FORD.

Genoa Junction, Wis.

Every number of the BULLETIN receives a hearty welcome here. We find no other journal "just as good." J. J. KELLY.

Tower, Mich.

I am satisfied that I get more for this dollar than for any other that I spend during the year! GEO. E. MARINER.

La Crosse, Wis.

The BULLETIN is the real, live, alert magazine for pharmacists. D. C. RICE.

Hot Springs, Va.

I find your magazine the best yet—and I've had them all! D. I. COHEN.

Jersey City, N. J.

The BULLETIN is the only journal that gives you *facts!* MCPHERSON & RALSTON.

Kewanna, Ind.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

The New York Telephone Controversy.—

The fight waxes hot between the New York Telephone Co. and the pharmacists in that State. The druggists are taking a firm stand against the reduction in their commissions and have the support of the people

Drug Store 'Phones To Go Out To-morrow

Buffalo druggists are circulating a petition to be presented to the Public Service Commission as a protest against the new rule of the New York Telephone Company under which the slot machine in drug stores will be discontinued to-morrow. The company, in accordance with its general system now in effect throughout its territory, will allow agents holding the slot machines to collect only 10 per cent of the gross receipts. The druggists claim that this will not allow them enough to pay the cost of keeping a booth in their stores. The company claims that it must maintain equal rates for all agents or else suffer under the penalties laid down by the Public Service Commission.

To Our Patrons:

This news item plainly speaks for itself.

The New York Telephone Company has seen fit to remove our telephone because we would not submit to a reduction in our commission from them.

But we are by no means out of business—we would be pleased to fill any orders over the Federal or Frontier telephones, or we will send our messenger to your home for your orders.

Yours Sincerely,

GAUGER & BRECKON

in their conflict. Gauger & Breckon, 351 Potomac Avenue, Buffalo, in their store paper recently devoted a whole page to the telephone controversy. The ad., as may be seen from the accompanying reproduction, was intended to enlist the support of the reading public.

An Ingenious Newspaper Ad.—

Dressed in the form of an ordinary news item there appeared a short time ago in the *Atchison Daily Globe* a drug-store ad. It had been inserted by Matt Noll, of Atchison, Kansas, and was run single column among the general reading matter. Whether it came in for more attention than a display ad. is a matter of speculation. Here it is at any rate:

A COLLECTION OF IMPORTANT PARAGRAPHS FOR YOUR CONSIDERATION.

Get the old idea out of your head that you must take your prescriptions to the Drug Store whose name appears on your doctor's blank. Pick your own druggist with the same care you pick your doctor. Isn't this common sense? When the doctor prescribes certain medicines he expects them to give certain results; to get these results the druggist that fills your prescriptions must not merely know how to put a little of this and a little of that together, but must have the knowledge and experience to read the doctor's prescription correctly. If you tell your doctor that Mr. —— is my druggist and the doctor knows the druggist mentioned is all right, he (the doctor) should have no kick coming.

Matt Noll's Drug Store has now filled 190,000 prescriptions, and every one has been filled by a man who knows drugs. Mr. Noll keeps no others. Prescriptions are filled with care, accuracy and knowledge when they come from Noll's, and for this reason we feel you will not make a mistake in picking out this store to get your medicine. We have yet to see the doctor's prescription we can't fill. True, we perhaps do not carry every drug in the world, but if it's a rare drug we can get it. Just tell your doctor you want to take your prescription to Noll's, or see to it that he leaves them there, and we are not afraid of his criticisms. For we know how to fill prescriptions, and no guesswork goes here. We do not overcharge for prescription work. See that M. Noll, the Man Who Knows Drugs, fills your prescriptions. Then feel Safe.

An Artistic Calendar.—

An unusually pretty calendar was distributed this year by Spotts & Post, of Le Mars, Iowa. The store picture seen at the top was the original photograph pasted on a heavy corrugated cardboard of chocolate

color. A very light tan border, suspended loosely from the bow cord at the top, served to bring out conspicuously the picture of the pharmacy. At the bottom was a 1912 calendar bearing a cover done in colors. The whole design was in very good taste.

Skin-deep Beauty.—

The ordinary coloring in birds, flowers, etc., is explained as due to the pigment cells, but that of the peacock and certain pigeons is more like the light reflected from extremely thin metals. A. Michelson estimates that the thickness of the pigment film in some cases does not exceed twenty-five one-hundred-thousandths millimeter.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Astute Amoras.—

Selenium cells are made which are 100 times as active electrically in the light as in the dark, and which respond to an exposure to light in a few seconds.

Eighty cities in Great Britain use their garbage for the development of electric power, and the number is increasing.

The most delicate test for hydrogen peroxide is a strip of paper saturated with a cobalt-naphthenic acid solution. One part of peroxide in one million can be detected.

Celtium is the name of the newest element in point of discovery. Maybe its properties have something to do with its name.

Thallium is ranked as one of the most poisonous of metals, being close to arsenic in toxicity.

Areca nut in one-per-cent proportion will destroy vinegar-eels. Senna and kamala will also destroy them, but more slowly.

Rapid digestion does not necessarily mean more complete assimilation of foods. There is some evidence that there is better absorption in slow than in rapid digestion.

Violet light decomposes water in the same way as that of an electric current, but very slowly. It first forms hydrogen peroxide, then splits this up into hydrogen and oxygen.

Sunflowers, which are in common use in Russia for medicinal purposes, and also for food, have been found to contain two alkaloids—choline and betaine.

Fruits contain an enzyme which protects them from fungus and bacterial growths, and which when the fruits are bruised is the cause of the brown color which develops in the bruised part.

Dr. Boetau, of France, has given his life to radium research. His hand was burnt by radium and the burn killed him. Operations failed to save him.

Bromine solutions in which there is no bromide are darker than the same strength of solutions in which a soluble bromide is dissolved. In other words, bromides reduce the color of bromine solutions—to a certain point.

Distilled water, in the presence of air, dissolves lead and iron. The metals dissolve in the colloidal condition.

Sodium aluminosilicate, made by boiling together sodium silicate, sodium hydroxide, and aluminum hydroxide, is said to be a good substitute for soap, and is recommended as a detergent.

Over 2000 tests of the air in sleeping-cars, under varying conditions, have convinced T. R. Crowder that the ventilation in sleeping-cars is ample, and that discomfort is due to overheating or other causes.

J. J. Hazewinkel says that a satisfactory caramel may be made by heating molasses to 125° C. for five to ten hours, the time being controlled by testing the intensity of the color.

Oh for a Patent on This!—

One of the latest theories of the disintegration of matter (called out by radium and actinium) is a suspicion which scientists hardly dare to voice, that there is a continual disintegration of *all* matter, stability being only relative, and the new and perfectly inactive gases recently discovered in the atmosphere being among the most stable elements. Hence the day may come when, able to control the internal forces of the atom and to effect the transmutation of atoms, man may set about destroying matter as such altogether, for use in his industries at so much per kilowatt-hour. It is just as reasonable for an atom to die as to be born. —(Alfred Sang, in "The Underlying Facts of Sci ence.")

Aeroplane News.—

A. Wegener says that the atmosphere probably consists of four layers: The lowest, one of clouds and storms, and of temperature decreasing upwards. This layer is calculated to have an average height of 11 kilometers (7 miles). The second layer extends to 70 kilometers (44 miles) and has a uniform temperature of about —55°. Above this lies the hydrogen layer, extending to about 220 kilometers (138 miles), in which the shooting stars are brought to incandescence. And still above this is a layer of a gas unknown on the earth which is still lighter than hydrogen.

Costs More!—

Professor Ostwald has obtained ice in a colloidal condition, the particles being so small that they passed through a filter-paper. He thinks that the colloidal condition is possible for all matter. Colloidal ice is not perfectly clear, but has a blue-yellow opalescence.

You're Another!—

P. Weiss says that "Magneton" is the ultimate principle of matter, the thing from which atoms are builded and in which all things exist. He has found it in atoms of iron, nickel, cobalt, copper, manganese, uranium, and the rare earth metals.

WHERE THE CALIFORNIA MEETING IS TO BE HELD.—The annual meeting of the California State Pharmaceutical Association will be held this year at the famous Hotel Del Monte. This is within a stone's throw of many old historic places, one of which is illustrated in the present picture. This shows the Carmel Mission, which is very near Monterey. The convention will be held during May; the place is one of very great interest; the Entertainment Committee is getting up a lot of special things; and there is every reason why the attendance should be a large and enthusiastic one.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Baking Powder.

S. W. K.—Cream of tartar and sodium bicarbonate, mixed in the proper proportions, yield a baking powder which is apparently the least objectionable of any, from a hygienic point of view, and gives satisfaction. As the result of an investigation of the leading powders of the market, Crampton, of the United States Department of Agriculture, has proposed the following formula for a cream of tartar baking powder:

Potassium bitartrate	8 ounces.
Sodium bicarbonate	4 ounces.
Corn-starch	4 ounces.

The addition of the starch answers the double purpose of a "filler" to increase the weight, and a preservative, the chemicals not keeping well when mixed alone. The stability of the powder is increased by drying each ingredient separately by exposure to a gentle heat, mixing at once, and immediately placing in bottles or cans, excluding access of air, and consequently moisture.

A cheaper powder can be made after the following formula, but it will not be found nearly as satisfactory:

Ammonium carbonate, crystalline	6 ounces.
Tartaric acid	½ pound.
Alum	1 pound.
Sodium bicarbonate	1½ pounds.
Starch (or flour or potato farina)	2 pounds.

The ingredients must be pulverized and sifted separately, dried at a very low temperature, mixed in a perfectly dry room, and immediately packed with great pressure into receptacles and sealed air-tight, to prevent, as nearly as possible, the loss of ammonia.

Lemon Cream.

C. H. H. wants a formula for making a toilet preparation—a cream of fresh lemons.

The following formula forms a pomade from which we confess the watery portion has a tendency to ooze out:

White wax	2 ounces.
Spermaceti	2 ounces.

Melt together and add

Almond oil	8 ounces.
Oil of bergamot	2 drachms.
Oil of lemon	½ ounce.

Then the following warmed together:

Glycerin of borax	2 ounces.
Lemon-juice	6 ounces.

If two drachms instead of two ounces of wax and spermaceti are used, the result is better and the preparation a liquid.

A lemon cold cream might be made by substituting the juice of lemons for a portion of the water in preparing cold creams. But the product is not permanent unless the cold cream be made with paraffin oil or contains considerable petrolatum. Many formulas for cold creams with mineral oil have appeared in the BULLETIN before, and can be found by consulting the annual indexes in the December issues.

Sun Cholera Cure.

A. H. F. wants the formula for the old sun cholera cure with the directions for its use.

We do not know just what formula is wanted. In 1846 or 1847 there was an awful epidemic of cholera in this country. In New York people died like sheep. The New York *Sun* contributed a fund for the preparation of a cholera cure which was distributed free among the people in buckets. The sufferers were allowed to help themselves to the remedy. The formula resembled that of the present N. F. cholera mixture:

Tincture of opium	6 fluidrachms.
Tincture of capsimum	8 fluidrachms.
Tincture of rhubarb	8 fluidrachms.
Tincture of camphor	6 fluidrachms.
Spirit of peppermint	6 fluidrachms.
Alcohol	6 fluidrachms.

Average dose, 30 minims.

Whether the foregoing preparation is the old formula is hard to say. But it is certainly very similar. To omit the opium would be inadvisable. All the diarrhea mixtures in the National Formulary contain opium, as that is the ingredient which corrects the looseness of the bowels. We hesitate therefore to suggest a preparation without opium, as you request.

Poultry Powders.

W. A. M.—Various mixtures of powdered substances are dispensed under the names poultry powder, poultry food, egg food, and egg-making food. The latter two names are used because of the alleged property of these mixtures, of increasing the egg-laying power of hens and other fowl. Mixtures that contain strong spices like capsicum are supposed to stimulate the egg-laying power of fowl.

(1)

Ground bone or slaked lime	12 ounces av.
Ginger	2 ounces av.
Gentian	1 ounce av.
Capsicum	1 ounce av.
Sulphur	1 ounce av.

Reduce all to powder and mix well.

Mix a teaspoonful with a quart of feed.

(2)

Oyster shells, coarse powder	24 ounces av.
Calcium carbonate	4 ounces av.
Calcium phosphate	4 ounces av.
Black pepper	4 ounces av.
Capsicum	½ ounce av.
Venetian red	½ ounce av.

Reduce all to powder and mix well.

Use like the preceding mixture.

Clarifying the Juice from Sugar Cane.

M. E. B. writes: "What process is used for clarifying cane syrup? Name the chemicals employed."

The juice as expressed from the cane is a dirty-looking mass and requires to be clarified before it is concentrated. It is a very common practice to subject the fresh juice to the fumes of burning sulphur. In all cases the first step in the clarifying is the addition of lime to neutralize the natural acidity of the juice and facilitate the coagulation of the dissolved matter. The limed juice is next subjected to heating, and as the boiling point approaches a separation of the suspended and coagulated matter takes place, the light coming to the top and the heavy falling to the bottom. The common method of separating these bodies is by skimming the top coagulum and settling the bottom portion and drawing off the clear juice therefrom. In

addition to this, to get a more complete separation the heated juice may be run through a filter press.

It is declorized with animal charcoal, the work being done in large cisterns.

Label Varnishes.

W. E. G. submits the following query: "Please publish the formula of some preparation other than collodion for painting over paper labels before applying the varnish. I find collodion dries too fast and also adheres to the brush so that it cannot be used again."

We give the formula of a varnish as well as the method of sizing:

Sandarac	3 ounces av.
Mastic	¾ ounce av.
Venice turpentine	150 grains.
Alcohol	16 fluidounces.

Macerate with repeated stirring until solution is effected, and then filter.

The paper labels are first sized with diluted mucilage, then dried, and finally coated with the varnish. If the labels have been written with water-soluble inks or color, they are first covered with two coats of collodion, and then varnished.

Saturated Solution of Ammonium Chloride.

G. T. O. writes: "I am directed to make a saturated solution of ammonium chloride, using diluted alcohol as a solvent. How much ammonium chloride will be required to make 8 ounces of the finished product?"

According to the Pharmacopœia, ammonium chloride is soluble in three parts of water and in 80 parts of alcohol. Not knowing the solubility of the salt in diluted alcohol, it will be necessary to determine that experimentally. Suppose you start with 7½ ounces of diluted alcohol and gradually add ammonium chloride, agitating after each addition, until a slight residue remains undissolved, indicating that the solution is saturated. The yield may be a little less than 8 ounces or a little more, but that can be adjusted very easily.

Veterinary Colic Remedy.

W. A. M.—The following draught for horses has been found to answer better than any other combination, but has the objection of being rather expensive:

Solution of chloral hydrate (1 grain in 1 minim)	2 drachms.
Extract of cannabis indica	2 drachms.
Oil of turpentine	2 ounces.
Spirit of ammonia aromatic	1 ounce.
Solution of aloes (1 in 4)	2 ounces.
Linseed oil, to make	6 ounces.

Mix and make a draught.

To be given in from ½ to 1½ pints of linseed oil.

This draught is an aperient, a diuretic, and an antispasmodic; it allays pain and checks inflammation. If gripes arise from impaction, it is doing valuable work while the veterinary surgeon is being sent for.

A Galenical Preparation of Phenolphthalein.

B. B. writes: "I would be glad if you will kindly print a formula for a liquid laxative containing phenolphthalein."

Such formulas have appeared in the literature during the last few years, but they are far from satisfactory. The taste of these preparations is extremely bad and all efforts to mask the disagreeable flavor have been unsuccessful. There is no elixir of phenolphthalein on the market that we know of. Phenolphthalein is best presented as a suspension in a chocolate syrup or in a chocolate lozenge.

A FAREWELL DINNER TO A. L. WALKER.—The annual meeting of the Detroit Association of Retail Druggists, reported upon elsewhere in this issue of the BULLETIN, practically resolved itself into a testimonial banquet in honor of A. L. Walker of this city. Mr. Walker is leaving for Seattle, Washington, to give himself a rest which a change of scene and of occupation will afford him, and he has sold his well-known pharmacy in this city in order to carry out his purpose. An alumnus of the School of Pharmacy of the University of Michigan, Mr. Walker for over 20 years has been one of the most able, faithful and self-sacrificing servants of pharmacy in Detroit and Michigan. Of pharmaceutical legislation he has always made a special study, and too much could scarcely be said of the good he has done and of the evil he has prevented. Mr. Walker is seen sitting at the head of the table in the very center.

That Creosote Mixture Again.

H. W. M.—John Evans, of Dublin, Ireland, noticed your query on page 42 of the January BULLETIN about the following mixture:

Morson creosote	16 drops.
Alcohol	1½ fluidrachms.
Water and syrup, enough of each to make	2 fluidounces.

Mr. Evans replies that "the foregoing mixture will not remain clear. If half the quantity of creosote is used it becomes opalescent when cooled to 60° Fahrenheit. If you desire a bright solution, 1 in 60, use 2 parts of glycerin to 1 part of water instead of syrup and water."

Worm Powder for Horses.

W. A. M.—The most effectual remedy is said to be a good dose of aloes, given on an empty stomach. This removes the parasites, but as the patient is probably weak a little tonic medicine is required, a very good formula being:

Santonin	12 drachms.
Arsenic trioxide	1 drachm.
Ferrous sulphate	12 drachms.

Make into twelve powders and give one in the corn every day. Or give half the powders and then the physic, and later the other six.

It may be found best to give the powders as worm powders and advise a dose of physic after, because horsemen have a sort of idea that worm medicine is correct only in the form of powders.

A Point of Law.

J. H. submits the question: "Would I be allowed to ship remedies put up under my name and guaranteed under the food and drugs act by the manufacturers?"

Charles M. Woodruff, well-known expert in legal matters pertaining to the drug business, replies as follows to this query:

The manufacturer's guaranty and serial number should appear only upon the packages bearing his label. Packages put up for you with your name and address should be guaranteed by the manufacturer on the invoice covering the shipment. No guaranty is required on your label unless you sell through other dealers and desire to protect them. Such dealers would not be protected by the manufacturer's guaranty, but should have yours. If you desire to extend a guaranty you should file a general guaranty with and obtain a serial number from the Secretary of Agriculture at Washington.

Incorporating Deodorized Tincture of Iodine in Wool-fat.

J. H. asks: "How would you mix deodorized tincture of iodine with hydrous wool-fat?"

Evaporate off the alcohol from the tincture, replacing it with a little water. Then the solution should mix with the adeps lanæ hydrosus. Alcohol is not taken up by the hydrous wool-fat as readily as water.

Soluble Powdered Glue.

V. H. B.—This formula may serve your purpose. Suppose you try it:

Potassium carbonate	1 part.
Alum	1½ parts.
Ordinary glue or fish glue	10 parts.
Water	4 parts.

The whole is mixed and boiled, dried by ordinary methods, and then pulverized. It is applicable to any use.

Remedy for Heaves and Distemper in Horses.

J. A. S.—We do not know the composition of the proprietary remedies which you mention. For the treatment of heaves in horses, Fowler's Solution is recommended. In cases of distemper or catarrhal fever in horses the following mixture is used:

Powdered opium	1 ounce.
Pulverized camphor	1 ounce.
Quinine sulphate	1 ounce.
Powdered gentian	8 ounces.
Ammonium chloride	4 ounces.

Make 24 powders. Give one powder at a dose in the feed or with a spoon three times a day.

German Creosote: Barbadoes Petroleum.

N. B.—Most of the creosote comes from Germany. The term "German creosote" probably indicates the beechwood variety, because the cheap coal-tar creosote can be obtained advantageously in this country.

Barbadoes petroleum, or Barbadoes tar, was formerly used for medicinal purposes. The Dispensatory says it is a dark-colored, almost black, viscid liquid, with a specific gravity of 0.73 to 0.78, and having a bituminous taste and odor.

Elixir of Catnep and Fennel.

W. E. G. wants a formula for elixir of catnep and fennel. Try the following:

Fluidextract of catnep	1 fluidounce, 160 minims.
Fluidextract of fennel	1 fluidounce, 32 minims.
Oil of coriander	4 minims.
Oil of anise	2 minims.
Alcohol	1 fluidounce, 120 minims.
Syrup, enough to make	16 fluidounces.
Caramel, enough to color.	

Each fluidounce contains fluidextract of catnep, 40 minims, and fluidextract of fennel, 32 minims.

Removing Tobacco Stains from the Fingers.

G. W. T. wants a method of removing cigarette stains from the fingers.

Try an alcoholic solution of ammonia. It usually does the work. Among chronic smokers who roll their own cigarettes, the brown color is embedded deeply in the skin, but even such stains are in the greater part removed by a mixture of alcohol and ammonia.

Why Not!

A. W. O. asks the following question: "Has a druggist got a right to make toilet creams, corn remedies, and tooth preparations and sell them under his own name?"

Certainly—why not?

Short Answers.

J. A. S.—We do not know the composition of the liquid dyspepsia remedy which you mention. Possibly elixir lactated pepsin will serve your purpose. A formula for it appears on page 22 of the National Formulary.

E. W. H.—The subject of disinfecting of water-closets was treated in this department of the BULLETIN for November, 1911, on page 483.

R. U. B.—A formula for silvering mirrors appeared in this department on page 526 of the BULLETIN for December, 1911.

BULLETIN OF PHARMACY

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THE MONTH'S HISTORY

DR. WILEY HAS RESIGNED.

Dr. Harvey W. Wiley, chief of the United States Bureau of Chemistry, on March 15 handed his resignation to Secretary Wilson of the Department of Agriculture. On the same day it was announced by the *Good Housekeeping* magazine that Dr. Wiley would become contributing editor to the Department of Health, Food, and Sanitation of that publication, with his office and laboratory in Washington. Thus ends the long battle and conflict of interests which has centered about Dr. Wiley.

The Doctor gave as his reason for resigning the fact that the activities pertaining to the Bureau of Chemistry were restricted, and various forms of manipulated food products were withdrawn from its consideration and referred either to other bodies not contemplated by the law or directly relieved from further control. Dr. Wiley said further that the official toleration and validation of such practices had restricted the activities of the Bureau of Chemistry to a very narrow field, and that he himself had been instructed to refrain from stating in any public way his opinion regarding the effect of food substances upon health. Dr. Wiley also expressed disappointment that those who had made charges against him for alleged irregularities in the employment of Dr. H. H. Rusby as consulting expert had not been dismissed from office, for their remaining made him conscious of an official environment which was essentially inhospitable. The differences between his superiors and himself he believed irreconcilable.

There may be other reasons, however, for Wiley's resignation. The *New York Times* intimates that he finds it hard to resist the attraction of larger financial opportunities. It is said that he has been receiving offers from private houses for several years, and his friends have sometimes wondered at his willingness to continue in public service in the face of so much controversy and antagonism when he could enjoy peace and bigger emoluments in other vocations. "I have been lambasted so much for my opinions," he admitted a short time ago to a Congressional Committee, "that I am getting thin-skinned." Asked whether he would be a candidate for head of the proposed Federal health department, for which he announced he was going to work, he answered by saying that he had held all the government positions he cared to fill.

It is reported that in addition to his editorial work he will become a public lecturer.

* * *

WILEY'S SUCCESSOR.

Now that Dr. Wiley has resigned his position the selection of a successor has become a matter of considerable importance. A canvass has been inaugurated by President

Taft for opinions of the leading universities, as to the choice of a permanent successor to Dr. Wiley. President Taft expressed regret at the resignation of Dr. Wiley, saying that he was very sorry to lose the services of a man who had done such great work, and that he would be glad to have him continue in the employ of the government. President Taft feels that he will have difficulty in finding a man to fill his place.

Dr. Wiley, the *New York Times* says, would like to be succeeded by Dr. Barnard, State Food and Drug Commissioner of Indiana, one of the foremost champions of pure foods and drugs in the country. He regards Dr. Barnard as a man of executive ability and scientific attainments, qualities that would make him a worthy candidate for the position. Dr. Barnard is a graduate of Harvard and has been identified with State food and drug inspection since 1901. His likeness appears elsewhere in this issue.

Another candidate who is mentioned as a successor of Dr. Wiley is Dr. R. E. Doolittle, who succeeded Solicitor McCabe on the Board of Food and Drug Inspection. Dr. Doolittle bears a good record and has had considerable experience in the work of the office.

We find the *American Druggist,* however, warmly recommending Dr. James H. Beal for the place. The New York College of Pharmacy has taken up the idea with avidity, and has adopted a series of enthusiastic resolutions commending Dr. Beal to President Taft's attention, and earnestly urging his appointment.

* * *

AN IMPORTANT DECISION ON PRICE RESTRICTION.

Justice Wright of the Supreme Court of the District of Columbia has recently made an important decision bearing on the right of the druggist to sell patent medicines at cut rates. It seems that James O'Donnell, the druggist, had been selling Sanatogen at cut rates notwithstanding repeated warnings to desist. Mr. O'Donnell insisted that he was privileged to cut prices on anything in his store. The Bauer Chemical Company, the proprietors of Sanatogen, therefore brought suit against Mr. O'Donnell, at first with little encouragement. Justice Barnard refused to issue a preliminary injunction against O'Donnell.

More recently the case came up again for a hearing before Justice Wright, who also favored the druggist. The court refused the injunction sought by the manufacturer on the ground that the Bauer Chemical Company was privileged by its license to market a patent medicine, but not to dictate the retail price of the article to the druggist as the product had already become an article of commerce through a complete sale by the patentee.

The Bauer Chemical Company, ruled the court, might undoubtedly impose any restriction upon the price at which Sanatogen might be sold by the druggist provided that were done when the article was first supplied him. But the court went on to explain that having failed to place any restrictions upon the price of Sanatogen at the time when the goods were sold to Mr. O'Donnell, the patentee had no further power in the matter. Mr. O'Donnell had purchased the article outright with no understanding about price and was therefore free to dispose of it as he chose. It would seem therefore that any move to control the price at which a patent medicine is sold is valueless unless it is made before or during the sale. After a manufacturer once gives a customer a free bill of ownership of a shipment, he cannot dictate the retail price at which the goods must be sold.

Justice Wright held that the patentee may hold a licensee or the first buyer with whom he has a contract to the full retail selling price. But when goods are bought by a druggist not under contract from a licensee, the manufacturer's right to dictate the price ceases. The buyer in that event receives an unrestricted title to the goods and may sell them as cheaply as he pleases.

* * *

A DRUGGISTS' WAGON.

For several years druggists in the Middle West have felt the competition of itinerant venders who canvass the country with their drug wares. Wisconsin pharmacists particularly have been alive to this traffic. They have therefore taken steps by which they themselves will operate wagons through the country. In fact the druggists in Jefferson county, Wis., have already met and made arrangements for the enterprise with headquarters in Palmyra. E. B. Heimstreet has been appointed to take charge of the venture throughout the State.

M. S. Kahn views with much satisfaction the attempt of Mr. Heimstreet and others in Wisconsin to meet the competition of itinerant venders. Attempts to impose a heavy license upon such dealers have failed and been deemed unconstitutional on the ground that they interfere with interstate commerce. Mr. Kahn therefore recommends in a letter written to *N. A. R. D. Notes* the plan of having the druggists of a town or county join together in sending out wagons to compete with the peddlers. This he deems the remedy that can be most quickly applied, and he feels it should be put into practice all over the country until legislation can be provided to stamp out the evil and give the druggists the exclusive sale of pharmaceutical products. Mr. Kahn thinks that the druggists can beat the peddlers at their own game. The people moreover can easily be educated to understand that it is much safer and cheaper in the long run to purchase a line of pharmaceutical preparations made by expert chemists and sold only to pharmacists. Mr. Heimstreet himself feels sanguine of the success of the druggists' wagon.

* * *

STRIKING CASES OF DRUG ADULTERATION.

The Denver Branch of the A. Ph. A. recently gave a dinner at which the members had the pleasure of listening to Mr. Robert S. Hiltner, chief of the U. S. Food and Drug Inspection Laboratory of Denver. Mr. Hiltner read a paper on drug adulteration. Here are a few of the more flagrant cases he cited:

Belladonna and henbane leaves, aloes, jalap, sage, cubebs, ergot, hydrogen dioxide, calcined magnesia, and many others have been found to differ widely from U. S. P. requirements.

Some of the most serious forms of adulteration and substitution are as follows:

Digitalis leaves, decayed; cumin seed, broken and full of dust; gum tragacanth, mixed with other gums, dirt and foreign matter, all unfit for medicinal use; iron by hydrogen, containing an excess of arsenic; oil of cajuput, with copper; oil of cassia, with lead, copper and rosin, are examples of another type of adulteration.

Anise, fennel and quince seeds, cubeb berries, gum myrrh and benzoin, uva ursi, buchu and senna leaves, etc., have been repeatedly found with excessive amounts of dirt and foreign matter, sometimes as high as 40 to 50 per cent.

Scopola has frequently been found substituted for belladonna root, pokeberry leaves for belladonna, long buchu for buchu, and artificial camphor for the natural gum. Such substitution is nearly always intentional, and is the more pernicious and more to be condemned on that account.

* * *

STILL WORK TO DO.

The number of such cases, as here enumerated, is becoming smaller and smaller every month, showing the wholesome effect of the law. Of course, it is not to be inferred for a moment, even if the drugs are pure when they are passed by the customs officials, that such high quality will be maintained until they reach the consumers. A single illustration, cited by Dr. Rusby, will emphasize the point. A New York jobber in crude drugs nearly fainted on being told that his ground belladonna root contained 50 per cent of olive pits, but soon learned from his own investigations that the miller, to whom he sent his fine drugs to be ground, was systematically abstracting a portion and substituting adulterants. Rascals there are in this country, as well as in Europe and elsewhere.

Most of the cases of adulteration observed in the inspection of interstate samples are in the same category with those noted for imported products, viz., failures to conform to Pharmacopœia specifications, substitution of cheap, inferior material for the more expensive or high grade; for example, senna siftings for leaves, acetanilide for phenacetine, mixing the product with dirt and inert vegetable débris. This is an exceedingly raw, offensive sort of adulteration. When one buys drugs that are as "cheap as dirt," he usually gets what he pays for.

* * *

DEATH OF LORD LISTER.

Joseph Lister, one of the most illustrious figures in modern medicine, died recently in London. He is known the world over as the discoverer of the principles of antiseptic surgery. It was Lister who exploded the theory of "laudable pus" and introduced measures to exclude infections from

wounds. The sterilization of instruments and dressings, the use of carbolic acid as a germicide, all date back to Lister. He also introduced the absorbable catgut ligature.

But it were only fair to add that Lister built up his theory of an antisepsis largely on the work of his contemporary Pasteur, who was teaching the world the rôle of germs in the processes of fermentation and putrefaction. When Pasteur announced that putrefaction was caused by germs, Lister at once surmised that suppuration was due to living organisms. He therefore took pains to exclude them from wounds, thus laying the foundation of modern antiseptic surgery. Few men have made greater contributions to humanity, and we can only observe with regret the passing of one who has done so much to save life and relieve suffering. Fortunately Lister lived to the good old age of 85. It is said that notwithstanding all the honors that were showered upon him he remained to the last a modest physician.

* * *

FAKE OPIUM CURES.

Jonah F. Rupert, a pharmacist in the United States Navy who has during recent months been on an American man-of-war over in Chinese waters, sends us the following paragraph taken from an annual report of the health officer of the port of Shanghai:

> The attempt to stamp out the opium habit in China has produced a multitude of anti-opium medicines. Many of these have been found on analysis in the laboratory to contain morphine. These act by replacing the opium habit by the morphine habit. In more than one instance samples sent to the laboratory for analysis by manufacturers have been found without harmful content, while medicines of the same name purchased as sold to the public have contained opium or morphine. Even in the hands of a qualified medical man the cure of the opium habit by means of drugs is one of the greatest difficulty. That a proprietary medicine could effect such a cure is practically impossible. But in the use of quack medicines the foreigner is little better than the native. Those who never trust their watches or boots to an amateur for repair, readily yield their bodies to the prescribing druggist and patent medicine proprietor, whose main object is to make money out of the gullible.

It is nothing new to discover that proprietary articles intended for the cure of the opium or the morphine habit have themselves contained the very narcotics which they were supposed to combat. They have thus been fakes—pure and simple. We recall that two or three years ago, Lyman F. Kebler, of the Bureau of Chemistry of the Department of Agriculture in Washington, prepared a bulletin showing that many of the habit cures imposed upon unsuspecting victims were frauds of this character.

* * *

CANDIDATES MUST OBSERVE REQUIREMENTS.

Candidates for registration papers must be very careful to comply with all the requirements of the State Board Examiners. Only recently, a few days before the Alabama State Pharmacy Board met in Birmingham, the members were informed through the Tennessee Board that one of the successful applicants at the Montgomery Board meeting last October had received a certificate through false representation. He was not twenty-one years of age, and had had only eighteen months' experience. Nevertheless, he swore that he was twenty-one and had had four years of experience. The young man hailed from Tennessee, and the foregoing facts came out by his trying to get an interchange certificate from the Tennessee Board.

The Alabama examiners learned that the young man was at work in a store in Birmingham, located him, and charged him with fraud. He confessed and was deeply mortified. His certificate was annulled at once. The Board passed a resolution that hereafter no application would be considered unless it be in the hands of the secretary with the fee and properly filled out at least five days before the Board meeting.

* * *

CIGARETTE CONSUMPTION INCREASING.

A statistical table printed in a recent issue of *Tobacco* reveals that the sale of cigarettes is increasing rapidly in the United States. The output during the month of January reached the enormous total of more than 667,000,000, or nearly double that of January, 1911, when it was something over 398,000,000. It is significant that during this month when cigarette production increases more than a quarter of a billion, cigars showed a falling off of more than 34,000,000. It is to be hoped that those tobacco dealers who cut the price on cigarettes with a view to making up the loss by the sale of cigars will see in these figures the folly of their action. The increase in the sale of cigarettes, it may be fairly supposed, was made at the expense of a decrease in the

sale of cigars. If the process continues it should impress upon all tobacco dealers that they must get the full price for cigarettes.

* * *

THE TELEPHONE SITUATION IN NEW YORK.

For several months the New York Pharmaceutical Conference has had some differences with the New York Telephone Company over the question of telephone commissions. The telephone company threatened to cut down the commission to 10 per cent, a move which the druggists very generally resented. In fact several had the booths removed from their stores. Now the New York Telephone Company comes forward with the following proposition, which will apply to all public pay telephone stations in Greater New York and probably throughout the State generally wherever the Bell system is installed: Stores doing 50 cents or less telephone business a day will receive 10 per cent commission on total receipts. Stores doing over 50 cents a day and up to $1 will receive 10 per cent on the first 50 cents and 15 per cent on the balance. Stores doing a business of over $1 a day will receive 10 per cent on the first 50 cents, 15 per cent on the second 50 cents, and 20 per cent on all receipts over $1.

These terms are considerably better than the flat 10-per-cent commission at first offered by the Telephone Company, but it remains to be seen whether they will suit the druggists.

* * *

SWEET OIL.

From time to time the United States Department of Agriculture has received inquiries asking whether or not it is permissible, under the Food and Drugs Act, to label cottonseed oil as "sweet oil." Investigations have shown that some samples marked "sweet oil" consist of cottonseed oil or a mixture of olive oil and cottonseed oil. A careful consideration of the subject leads to the conclusion that the only oil to which the term "sweet oil" may be correctly applied is olive oil.

It is held, therefore, by the Board of Food and Drug Inspection, that any oil other than olive oil is misbranded when sold under the name of "sweet oil." It is not correct, for example, to label cottonseed oil as "sweet oil" and then elsewhere on the label to describe correctly the true character of the oil.

COCAINE CONSUMPTION DECREASING.

It is sometimes said that despite the increasing number of anti-narcotic laws, the total consumption of drugs like opium and cocaine is regularly increasing. That this is not wholly true may be gathered from an authentic report recently emanating from a dealer in Hamburg, Germany, who is claimed to be the largest handler of so-called crude cocaine on the European continent. He declares that the consumption of this substance during 1911 was only 2417 kilos, whereas 3330 kilos more than that were consumed during 1910. Thus the figures were cut down more than half in one year! In the meantime, however, the importation of the alkaloid to Hamburg from South America was just as great, so that the European market is now considerably overstocked.

* * *

WHAT IS MARASCHINO?

The question of labeling products designated as "Maraschino Cherries," "Cherries in Maraschino," "Bigarreau au Marasquin," etc., has been considered by the Board of Food and Drug Inspection. After due investigation the Board is of the opinion that "Maraschino Cherries" should be applied only to the marasca cherries preserved in maraschino.

Maraschino is a liqueur or cordial prepared by process of fermentation and distillation from the marasca cherry, a small variety of the European wild cherry indigenous to the Dalmatian Mountains. Liqueurs or cordials prepared in imitation of maraschino with artificial flavors or otherwise will not be held to be misbranded if plainly labeled "Imitation" in some manner to show their true character.

* * *

CONTAMINATED MINERAL WATER.

We have heard it said that mineral waters are apt to harbor germs. Now it appears that the government is taking steps to prosecute firms that sell such contaminated liquids. One company has recently been fined $25 for supplying a mineral water that was found to be full of bacteria. The transaction was considered a violation of the food and drugs act. Adulteration was charged for the reason that the product consisted in part of filthy animal or vegetable substances and contained injurious ingredients.

EDITORIAL

IS HE RIGHT?

William J. Robinson, Ph.G., M.D., editor of the *Critic and Guide*, has a trenchant editorial in the February issue of that journal under this caption: "Of All Professions, Pharmacy Alone is Asleep." Dr. Robinson goes on to say:

> All professions are waking up, physicians, dentists, lawyers, clergymen, even the nurses are beginning to take an interest in things other than those belonging to the strict limits of their profession. They are beginning to recognize that besides being doctors, lawyers, etc., they are also human beings; that besides belonging to a certain profession or trade they also belong to humanity. And they therefore invite prominent men to lecture to them on subjects outside their professional boundaries, on subjects of broad human interest.
>
> Alone of all professions, Pharmacy sleeps. When druggists meet, they discuss such palpitating subjects as the best method of making lime-water, how to prepare syrup of senega, how to coat phosphorus pills (which nobody uses), how to make two cents more profit on Lydia's Vegetable Confound or Father John's Nostrum, whether it is best to dress the window with toilet paper or hair soles, or how best to handle stationery, candy, and ice-cream drinks. These subjects are proper subjects for pharmacists to discuss. But why not once in a while, once in a great while, take up some real subject, some topic of broad human interest
>
> Are you afraid it might hurt you, if you attempt to broaden your mind a little?

Dr. Robinson has the reputation of being a clear thinker and trenchant writer, but it is very evident that our medical friend has never attended an N. A. R. D. convention, or a good State meeting for that matter. His impressions of such conventions are evidently based on a few extracts from scientific papers that have been read at pharmaceutical gatherings and subsequently published in the drug journals. No topics of broad human interest at pharmaceutical conventions? Such an inference were most unfounded. Many a pharmacist in this country owes a good share of his general culture to a regular attendance at the annual conventions of the pharmaceutical associations to which he belongs.

Take the last annual meeting of the N. A. R. D. at Niagara Falls, for example. Men who left the four walls of their stores to attend that convention gave any amount of thought to subjects of a broadening nature. They gained some insight into the workings of our national political bodies. Through the reports and debates of the legislative officers, they learned something about the great law-making machinery of our country. More than that, they themselves took an active part in the discussion of political questions, wrestled now with the Sherman anti-trust act, again with the Sherley bill, and then with other measures affecting the drug trade. Isn't that sort of work broadening and deepening? It gives a man a certain amount of judicial grasp and makes him a broader member of the community. How many of the druggists now in politics received their first knowledge of parliamentary law and their early training in public affairs from the proceedings of pharmaceutical societies? Drug conventions narrowing? Not for a moment.

At the last N. A. R. D. convention even the cigarette evil came up for consideration. The sale of liquor and habit-forming drugs was discussed. From the talk on these subjects the listener learned a certain amount of sociology, gathered ideas about human problems, and went away with a desire to do what he could to minimize social evils. Even philosophy came in for a fair share of attention at the Niagara convention. A whole afternoon was given over to a lecture by Elbert Hubbard. It abounded in wit and humor of the better sort. It brought the members of the convention into contact with literature that they may not have known before and contributed not a little to their intellectual enjoyment. What would the Doctor have us discuss? Women's suffrage?

Subjects of broad human interest! The national conventions are full of them. The State meetings, too, do much to elevate the intellectual level of all who attend them. It is a great mistake to suppose that all is lime and senega at pharmaceutical gatherings.

JNO. H.

THE ADVERTISING GAME—A NEW ONE!

We have it on the undisputable authority of an oft-repeated bit of wisdom that there is more than one way of skinning a cat. One of our "esteemed contemporaries" has discovered a new method recently. It is of more than passing interest. This particular contemporary is anxious to increase its circulation. So what does it do? It makes a canvass of different cities to see what the circulation is in

those particular places of the different drug journals. Now once in a while it happens that this one journal finds it has more subscribers in a town than any of the rest of us. Good! Then it proceeds to get out a folder giving the full list of drug journals circulated in that town, with the number of subscribers credited to each of them. Of course in such cases our friend appears at the top, with more subscribers than anybody else, and its name is printed in bolder and blacker type than is devoted to those of us who simply fill in the inconspicuous places underneath. Rather a clever scheme, isn't it?

But we are really beginning to worry—not for ourselves, but for our contemporary. We are afraid he won't find many towns where he stands at the top, and what will become of his scheme if he can only trot out a few circulars of this kind? The advertisers won't be convinced, will they? And if they are not convinced, what's the use of spending a lot of money in time, printer's ink, and postage charges? Oh, well, we always were able to take the other fellow's troubles philosophically, and so we shall let him skin the cat in any way that he thinks best. Skinning operations are rather difficult anyway.

But, speaking of skinning games, we can scarcely resist making the mild and temperate suggestion that our contemporary stick to the plain truth in giving his figures, even though it proves embarrassing. In the only circular we have so far seen, that alleging to give the facts about an eastern city, the number of BULLETIN subscribers credited to us was less than half of those on our paid list. This particular phase of the cat-skinning operation isn't clever—it's stupid!

THE ACTIVITY OF THE KANSAS STATE BOARD OF HEALTH.

The State authorities are doing some very good work in the prevention of disease. Kansas particularly has made an effort to educate people in prophylaxis, to teach them the simple measures which, properly observed, ward off infections. A Kansas Health Almanac is issued yearly conveying to the people the saving truths of public health. They are shown the loathsome nature of smallpox and urged to be vaccinated. Conditions that predispose one to pneumonia are given, together with the rules for avoiding the disease. The subject of infants' complaints and whooping-cough are treated, and simple rules given for the prevention of tuberculosis.

Dr. S. J. Crumbine, secretary of the Kansas State Board of Health, is doubtless responsible for much of the good work that is being done in his State in the field of hygiene. He takes a very active part in the inspection and sanitation of both foods and drugs. He is responsible for the fly crusade. Knowing that these insects spread typhoid fever or even tuberculosis, Dr. Crumbine has urged the people to cart away or burn up animal and vegetable refuse upon which the flies thrive. Mosquitoes, too, have come under the ban. Stagnant pools which furnish a breeding ground for these germ carriers, are being drained or filled.

Dr. Crumbine is also responsible for the shipment of oysters in tightly closed containers which do not permit the addition of water and the entrance of disease germs. An effort is being made to exclude contaminating influences from this popular food. For when bacteria once gain access to oysters they find there a good medium for their growth.

Through the activity of the Kansas State Board of Health several fines have been imposed upon men for improperly displaying foodstuffs on the sidewalks. Dealers in some instances have been guilty of exposing meats, vegetables, and other kinds of foods without having them properly protected from insects or disease germs. Dr. Crumbine forces all restaurants, hotels, and various other establishments that cater to the public to keep their floors clean, their kitchens sanitary, and every door and window screened against flies. No one is allowed to haul bread or meats through the streets without having them covered so that they cannot be contaminated by dust. These are just a few reforms that Dr. Crumbine has accomplished in a quiet but forceful way, showing what a strong influence a State board of health can exert for the public good.

PHYSICIANS AFTER THE MIDWIVES.

Physicians are giving a good deal of attention to the status of midwifery if we may judge from the articles that have been appearing in the medical journals on that subject. They seem to be very much aroused over the way midwives have been encroaching on their domain. Far from being merely an aid to the

doctor, the midwife seems to be usurping his duties and supplanting him throughout the period of childbirth. It is said that in the large cities midwives have entire charge in over half the births.

No wonder the doctors complain. They take the stand, and very rightly too, that only a man or woman with a medical degree, with a professional knowledge of anatomy, pathology and obstetrics, can deliver babies safely. Frequently, moreover, minor gynecological operations are required at childbirth, which call for the services of an expert practitioner. Nevertheless the midwife often has no hesitation about handling abnormal cases as well as the uneventful ones.

In Europe, particularly among the peasantry, where women are rugged breeders, there is a bigger field for the midwife. Labor cases are normal and the physician is glad to be relieved of much menial work. Furthermore, the midwife cares for the family during the confinement of the mother, serving as a domestic as well as a nurse. But in America the midwife has few if any household duties. Her services are purely medical. To tell the truth, she supplants the doctor. Her charges, however, offer no particular inducement, for her fee is little less than the doctor's. She receives from eight to ten dollars a case. It is hard to understand why so many of the foreign-born women would rather have a midwife attend them than a physician. Modesty does not offer the explanation, for there are any number of competent women practitioners to attend members of their own sex.

And so the controversy continues between the physicians and the midwives. Meanwhile some substantial good has been accomplished in that the different States have raised the requirements for the practice of midwifery. In New York City, for instance, women who wish to follow the vocation must obtain permits from the Department of Health. Their character, their past reputation, and their home surroundings are all looked into by the authorities. Recently a school for midwives was started in the metropolis, the first of its kind in the United States under municipal control. Candidates for a diploma remain for six months under the tutelage of a doctor and a nurse. This is right—if the midwives are to attend so many cases of labor let them be properly trained.

THE HALL OF FAME

LEAVES BASEBALL FOR PHARMACY.

Dr. James Casey, ball-player and dentist, has retired from baseball. He has purchased the drug store of A. L. Walker on Woodward Avenue, Detroit, Mich., and says he is through with the diamond for all time. Dr. Casey is the second ball-player to embark in the drug business in Detroit within a short time. Davy Jones, Detroit's left-fielder, is the proud proprietor of a flourishing store on Adams Avenue East.

At the close of the 1911 season Dr. Casey decided that he didn't want to play baseball

DR. JAMES CASEY.

actively any longer and was looking for a position as manager, when A. L. Walker, a prominent Michigan pharmacist, offered his store for sale. It was a first-class stand on Detroit's busiest thoroughfare, and Dr. Casey bought the place. He is a graduate in dentistry of the Baltimore Medical College, and for a time practiced that profession.

It cannot be doubted that if Dr. Casey shows half the "pep" in the drug business that he did behind the plate on the Tiger Nine, his success is assured beyond a doubt. Dr. Casey began his baseball career as backstop; and in six years worked himself up from the New England League to the Eastern. Possessed of a splendid throwing arm, he was a strong man on third base as well as the home plate. He

first started in 1892 with the Pawtucket, Rhode Island, Club. Then he went to Lawrence, and in 1894 to Portland, Maine. For three seasons he caught for the Toronto Club, going to Washington during the year of the Spanish-American war. The season of 1899 found him with Brooklyn and with the National League Champions.

It was in 1900 that Dr. Casey came to Detroit to try his fortune with the new American League. He remained here through the season of 1902, when he returned to the National League to play with the Cubs. Dr. Casey served as catcher of the Detroit team, where he earned the reputation of being an excellent player. He also became well known for his keen wit and repartee, being one of those players to whom the fans were glad to listen. Dr. Casey was not a flashy player, but always a brainy one. He broke the baseball record for quick thinking.

A MAN WHOM DRUGGISTS ARE INTERESTED IN.

A feature of this issue of the BULLETIN which we feel sure will attract considerable attention is the page of nine portraits of State

FLOYD TILFORD.

Food and Drug Commissioners. These are some of the men who have made the drug trade sit up and take notice during the last few years. As the administrators of the State pure food and drug laws, they have suddenly become important in the pharmaceutical eye, and we are quite convinced that our readers will be glad to see what they look like in actual life. They seem after all to resemble a lot of kindly disposed men!

In this place we are showing the portrait of Floyd Tilford, who is in charge of the Division of Foods and Drugs of the State Board of Health of Kansas. Dr. S. J. Crumbine, as the secretary of the Board, is the ranking officer in the enforcement of the food and drug law, but Dr. Crumbine has many other duties to perform, and he apparently leaves most of the food and drug work in charge of the head of the division. Mr. Tilford is furthermore Dr. Crumbine's immediate assistant, and is presumably in full authority during his chief's absence.

A YOUNGSTER WITH A PROMISING NAME!

The handsome boy of three years and six months shown in the accompanying portrait is

PARKE DAVIS EVERS.

Parke Davis Evers, of McGregor, Texas. His father, Max H. Evers, of the firm of Evers Bros., is so great an admirer of the house of Parke, Davis & Co. that he named his son after them. This certainly was a nice tribute to the firm, and it would also appear that, if there is anything in a name, this young man will in time be the head and front of some large manufacturing establishment. Look out for him!

Dr. John B. Bond, Sr., of Little Rock, Ark., whose home we show here, is familiarly known to druggists by his presidency of the State Board of Pharmacy.

D. J. Fink of Holdrege, Neb., is one of the active pharmaceutical figures of the State, and is an ex-president of both the Board of Pharmacy and the State Pharmaceutical Association.

This photograph of the residence of Prof. C. Lewis Diehl, 932 Cherokee Road, Louisville, Ky., was taken some years ago.

Owen Raymo of Wayne, Mich., has a comfortable home in one of the good-sized towns of this State.

From this photograph of the residence of E. C. Bent, Dell Rapids, S. D., secretary of the South Dakota Board of Pharmacy, it would appear that the Western snow-storms are the real thing.

H. Lionel Meredith of Hagerstown, Md., whose home is here pictured, is a member of the Board of Pharmacy and an ex-president of the State Association.

Homes of Well-known Druggists.

J. J. Goodyear, of Ann Arbor, Mich., has one of the most artistic and beautiful homes in an interesting University town where attractive residences are quite numerous.

This shows the comfortable porch and the well-kept lawn at the rear of Mr. Goodyear's house. The interior of the building is quite noteworthy.

The residence of H. K. Mulford, President of the H. K. Mulford Company, out in Wayne, one of the easily accessible suburbs of Philadelphia.

Here we have the homelike hall of Mr. Mulford's residence. Broad settees on each side of the room are not shown in the photograph.

This picture of the home of Wm. Mittelbach, Boonville, Mo., was taken several years ago, and in the meantime one of the young ladies has grown up and married.

Alfred B. Huested, the well-known pharmacist of New York State, has now retired from active business life and is living in Delmar, one of the suburbs of Albany.

Homes of Well-known Druggists.

J. D. Ryan, Coffin, Redington Co., San Francisco, Cal.

Geo. W. Lattimer, Kauffman-Lattimer Co., Columbus, Ohio.

Wm. J. Walding, Walding, Kinnan & Marvin Co., Toledo, Ohio.

Samuel E. Strong, Strong, Cobb & Co., Cleveland, Ohio.

O. F. Fuller, Fuller & Fuller, Chicago, Illinois.

C. E. Bedwell, E. E. Bruce & Co., Omaha, Nebraska.

Clayton F. Shoemaker, Shoemaker & Busch, Philadelphia, Pa.

Wm. A. Hover, W. A. Hover & Co., Denver, Col.

Fred. L. Carter, Carter, Carter & Meigs Co., Boston, Mass.

A Page of Prominent Jobbers.

H. E. Barnard, B.S., Food and Drug Commissioner of Indiana, Indianapolis, Ind.

Gilman M. Dame, Dairy and Food Commissioner of Michigan, Northport, Mich.

James Foust, Dairy and Food Commissioner of Pennsylvania, Harrisburg, Pa.

J. Q. Emery, Dairy and Food Commissioner of Wisconsin, Madison, Wis.

Charles Caspari, Jr., Food and Drug Commissioner of Maryland, Baltimore, Md.

Sylvanus E. Strode, Dairy and Food Commissioner of Ohio, Columbus, O.

E. F. Ladd, Food Commissioner of North Dakota, Fargo, N. D.

Edwin DeBarr, Director of Oklahoma Pure Food and Drug Laboratory.

Charles D. Woods, Administrator of the Maine Drug Law, Orono, Me.

The Men Who are Administering the State Pure Food and Drug Laws.

J. D. Ryan, Coffin, Redington Co., San Francisco, Cal.

Geo. W. Lattimer, Kauffman-Lattimer Co., Columbus, Ohio.

Wm. J. Walding, Walding, Kinnan & Marvin Co., Toledo, Ohio.

Samuel E. Strong, Strong, Cobb & Co., Cleveland, Ohio.

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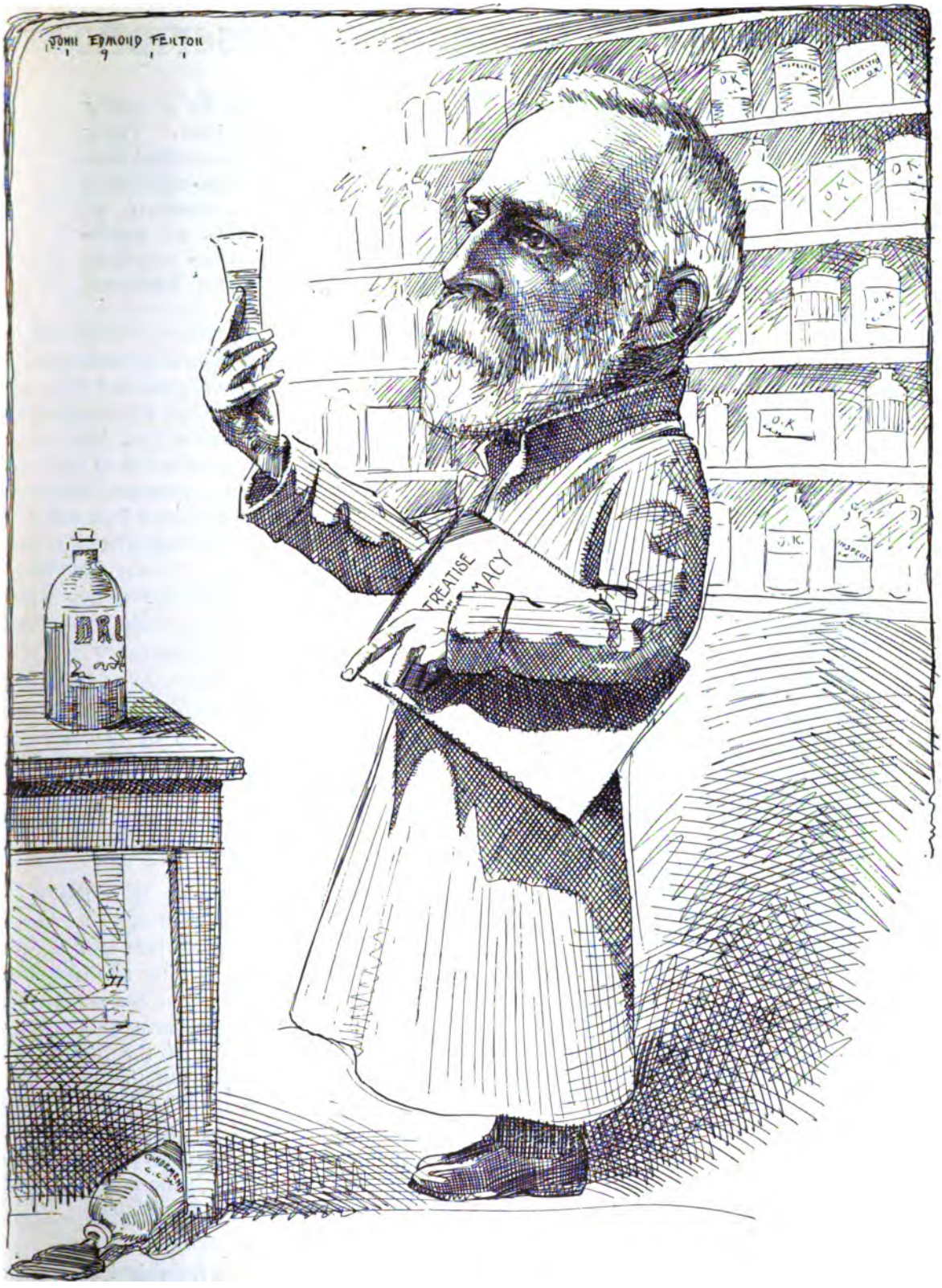
The Men Who are Administering the State Pure Food and Drug Laws.

[Photograph made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

1. Wilhelm Bodemann, Chicago.



Professor Caspari in His Rôle as Food and Drug Commissioner of Maryland.

Chas. Caspari, Jr., dean of the Maryland College of Pharmacy, author of "A Treatise of Pharmacy," one of the editors of "The National Standard Dispensatory," in early life a retail druggist for many years, and for a long period the general secretary of the American Pharmaceutical Association, was a year or two ago made Food and Drug Commissioner of the State of Maryland and is administering the law with great fairness and enlightenment.

doctor, the midwife seems to be usurping his duties and supplanting him throughout the period of childbirth. It is said that in the large cities midwives have entire charge in over half the births.

No wonder the doctors complain. They take the stand, and very rightly too, that only a man or woman with a medical degree, with a professional knowledge of anatomy, pathology and obstetrics, can deliver babies safely. Frequently, moreover, minor gynecological operations are required at childbirth, which call for the services of an expert practitioner. Nevertheless the midwife often has no hesitation about handling abnormal cases as well as the uneventful ones.

In Europe, particularly among the peasantry, where women are rugged breeders, there is a bigger field for the midwife. Labor cases are normal and the physician is glad to be relieved of much menial work. Furthermore, the midwife cares for the family during the confinement of the mother, serving as a domestic as well as a nurse. But in America the midwife has few if any household duties. Her services are purely medical. To tell the truth, she supplants the doctor. Her charges, however, offer no particular inducement, for her fee is little less than the doctor's. She receives from eight to ten dollars a case. It is hard to understand why so many of the foreign-born women would rather have a midwife attend them than a physician. Modesty does not offer the explanation, for there are any number of competent women practitioners to attend members of their own sex.

And so the controversy continues between the physicians and the midwives. Meanwhile some substantial good has been accomplished in that the different States have raised the requirements for the practice of midwifery. In New York City, for instance, women who wish to follow the vocation must obtain permits from the Department of Health. Their character, their past reputation, and their home surroundings are all looked into by the authorities. Recently a school for midwives was started in the metropolis, the first of its kind in the United States under municipal control. Candidates for a diploma remain for six months under the tutelage of a doctor and a nurse. This is right—if the midwives are to attend so many cases of labor let them be properly trained.

THE HALL OF FAME

LEAVES BASEBALL FOR PHARMACY.

Dr. James Casey, ball-player and dentist, has retired from baseball. He has purchased the drug store of A. L. Walker on Woodward Avenue, Detroit, Mich., and says he is through with the diamond for all time. Dr. Casey is the second ball-player to embark in the drug business in Detroit within a short time. Davy Jones, Detroit's left-fielder, is the proud proprietor of a flourishing store on Adams Avenue East.

At the close of the 1911 season Dr. Casey decided that he didn't want to play baseball

DR. JAMES CASEY.

actively any longer and was looking for a position as manager, when A. L. Walker, a prominent Michigan pharmacist, offered his store for sale. It was a first-class stand on Detroit's busiest thoroughfare, and Dr. Casey bought the place. He is a graduate in dentistry of the Baltimore Medical College, and for a time practiced that profession.

It cannot be doubted that if Dr. Casey shows half the "pep" in the drug business that he did behind the plate on the Tiger Nine, his success is assured beyond a doubt. Dr. Casey began his baseball career as backstop, and in six years worked himself up from the New England League to the Eastern. Possessed of a splendid throwing arm, he was a strong man on third base as well as the home plate. He

first started in 1892 with the Pawtucket, Rhode Island, Club. Then he went to Lawrence, and in 1894 to Portland, Maine. For three seasons he caught for the Toronto Club, going to Washington during the year of the Spanish-American war. The season of 1899 found him with Brooklyn and with the National League Champions.

It was in 1900 that Dr. Casey came to Detroit to try his fortune with the new American League. He remained here through the season of 1902, when he returned to the National League to play with the Cubs. Dr. Casey served as catcher of the Detroit team, where he earned the reputation of being an excellent player. He also became well known for his keen wit and repartee, being one of those players to whom the fans were glad to listen. Dr. Casey was not a flashy player, but always a brainy one. He broke the baseball record for quick thinking.

A MAN WHOM DRUGGISTS ARE INTERESTED IN.

A feature of this issue of the BULLETIN which we feel sure will attract considerable attention is the page of nine portraits of State

FLOYD TILFORD.

Food and Drug Commissioners. These are some of the men who have made the drug trade sit up and take notice during the last few years. As the administrators of the State pure food and drug laws, they have suddenly become important in the pharmaceutical eye, and we are quite convinced that our readers will be glad to see what they look like in actual life. They seem after all to resemble a lot of kindly disposed men!

In this place we are showing the portrait of Floyd Tilford, who is in charge of the Division of Foods and Drugs of the State Board of Health of Kansas. Dr. S. J. Crumbine, as the secretary of the Board, is the ranking officer in the enforcement of the food and drug law, but Dr. Crumbine has many other duties to perform, and he apparently leaves most of the food and drug work in charge of the head of the division. Mr. Tilford is furthermore Dr. Crumbine's immediate assistant, and is presumably in full authority during his chief's absence.

A YOUNGSTER WITH A PROMISING NAME!

The handsome boy of three years and six months shown in the accompanying portrait is

PARKE DAVIS EVERS.

Parke Davis Evers, of McGregor, Texas. His father, Max H. Evers, of the firm of Evers Bros., is so great an admirer of the house of Parke, Davis & Co. that he named his son after them. This certainly was a nice tribute to the firm, and it would also appear that, if there is anything in a name, this young man will in time be the head and front of some large manufacturing establishment. Look out for him!

erally made homogeneous with acacia, in internal mixtures.

In conclusion, it seems to me that this discussion involves the broad subject of manufacturing and dispensing, concerning which a book might be written.

There is one important rule that I failed to mention for the employer. Don't quarrel with your clerks, but keep them informed of your wishes. Those whom you cannot trust and are inefficient will find it out and leave voluntarily through one cause or another. They will not gain the sympathy of your trusted employees and will probably not condemn you themselves.

BY RICHARD H. LACKEY, PHILADELPHIA, PA.

There is very little that is unique or unusual about my methods of work at the prescription counter, and very little that would be interesting or valuable to BULLETIN readers.

The ideal plan of conducting a prescription

Richard H. Lackey.

business would comprise a separate room for each compounder, where he would be free from noise and interruption, and have at his disposal proper equipment in the way of balances, complete mixing and filtering appliances, hot and cold running water, and a stock of those medicines ordinarily used in compounding. Easy communication should be had to a fellow clerk or proprietor for assistance in checking.

The ideal, to the average store, is impossible. The next best thing is a rule prohibiting the interruption of a clerk engaged in compounding unless it be unavoidable, an absolute rule against substitution, the use of the best materials it is possible to obtain, and the proper checking of all prescriptions, including the labels. If the compounder brings to bear under these conditions a proper experience in mixing medicines and an adequate theoretical knowledge of his profession, he will, other things being equal, make a success of his prescription business.

In the last analysis, however, to paraphrase an old adage, eternal vigilance is the price of safety.

BY WILLIAM H. KIRCHGESSNER, GRAND RAPIDS, MICH.

We have the following rules for compounding prescriptions: The solubility of all substances must be considered. All salts must be dissolved before other preparations are added. Alkaloidal salts must be dissolved separately before mixing with the remaining prescription. Saturated solutions of all the salts that are used to any extent are kept on hand and the amount of salt in drachms is printed on each label.

Eye lotions must all be filtered before they are completed. The dosage of each ingredient must be figured so as to guard against an overdose. All prescriptions must be copied from memory, and then rechecked from the original, as we copy all the prescriptions that are sent to us and return the original if wanted.

BY F. W. BROWN, LEAD, SOUTH DAKOTA.

I have never found it necessary to adopt a series of printed rules of compounding for the instruction of my dispensers. As I spend considerable time at the dispensing counter, I have encountered no difficulty in passing the following system along to my assistants:

1. Upon receiving a prescription, give the patron a check telling the number of it and the time required for dispensing.

2. Read the prescription carefully to determine as to compatibility, proper dosage, and the order in which the ingredients should be added to produce the best results.

3. Select the container, utensils, and ingre-

dients. Do not return the ingredients until the operations are completed.

4. Compound and check. Use the double-check system when there are two dispensers on the case. Otherwise recheck when returning containers to their respective places. Clear the counter of soiled utensils.

5. Write the label plainly and attach it to the container, wrap neatly, seal, and attach the remaining check bearing the name of the patient, the number, and price.

In my opinion it is better form to write the label after the prescription is compounded, as it is a safeguard against confusion of labels when there are more than one prescription in the course of dispensing at the same time.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

(*Continued from March* BULLETIN.)

CHAPTER IV.

ADVERTISING THAT HELPED SPECIAL DAYS.

All kinds of holidays and celebration days bring with them special opportunities for the druggist.

These opportunities may not result in large receipts, or they may. A good deal depends upon how the druggist takes advantage of them.

I found it very profitable to get up special windows for all kinds of special days. I also used special newspaper advertising and sent special advertisements directly by mail.

CATERING TO STRANGERS.

Our town being the county seat we had several terms of court each year. Many strangers came to town, among them the jurors. We found it a profitable plan to mail advertising of the store's special lines to the jurors and the lawyers, whose names were easily procured from the public records.

When a man goes away from home to attend court for a few days, he is very likely to need a drug store. He wants cigars, headache or cold cures, stationery, post-cards, etc., and the store that has sent him a letter about such goods inviting him to come there for them, is more than likely to get his business.

Court week used to bring in a good many natives of the hill country back from the railroads and towns, and usually produced some queer demands. One morning I had a call from a customer who wanted to know which was better, "Pumpkin seed root or pumpkin seed extract." I advised the woman that I did not think there was very much difference in the dose or in its effect. Another back country lady bought Peerless dyes to color her hair with, and I have no doubt that she secured a very nice shade, though her hair was not wool.

And this reminds me of a colored lady who came in and asked me for a "bottle of pink pills for pale people," and then insisted upon my spraying her with about seventeen kinds of perfumery which she did not buy.

January first is of course the first special day of the year, and for the average drug store it brings some special opportunities. The average pharmacy sells some blank books and diaries, and this is the time they should be pushed. I always made them the subject of my first after-Christmas window displays and newspaper advertisements. I tried calendar advertising too at this time of the year.

*Copyright, 1912, by Frank Farrington.

CALENDAR ADVERTISING.

For six different years I used calendars at this season, and tried advertising special goods on them and also imprinting them only with the store name.

As a result of these calendar experiences I feel certain that the only gain from them was a limited amount of good-will. One January I gave away a large number of calendars on which I advertised a headache remedy put up and named for the express purpose of trying out the calendars. They did not produce one single call.

If you feel like paying out anywhere from $5 to $100 in good money for a very limited amount of good-will, I would say invest in calendars. If you want to get tangible and durable results, invest it in some of the more direct forms of advertising. I am free to confess, however, that in discussing this question with representatives of the calendar houses I have never found one who thought I knew what I was talking about.

One year I gave away instead of calendars little celluloid book-marks, and while they cost comparatively little they seemed to produce just as much good-will as the most expensive calendars I ever used.

SPECIAL HOLIDAY ADS.

For St. Valentine's day it proved profitable to send out an artistic valentine post-card each season with a special notice on it of a new perfume or toilet preparation, or a hair tonic. These of course were usually mailed to the ladies, and they were sent so as to reach them a day or so before St. Valentine's in order that they might not arrive after so many cards had been received that they were an old story.

For Lincoln's and Washington's birthdays and St. Patrick's day I used special window trims with plenty of decorated crêpe tissue-paper to give appropriate backgrounds. Hatchets cut out of bristol board and pasted on the glass helped Washington's display. Large framed pictures of Washington and of Lincoln were easily borrowed for use in such window displays.

Of course the main display was always of some seasonable and salable goods, the special-day matter being only to attract attention.

Easter should be made one of the big times in the drug store. The sales of perfumes, gift goods, candy, etc., ought to be very large, and they are if the druggist goes after the business in the right way.

One of the best plans I found for getting the Easter business was to give away a little souvenir of some sort the Saturday before Easter. On one occasion I offered in newspaper advertising and by dodgers to give free to every person making a purchase of five cents or more the choice of an Easter egg or chicken. I bought a large quantity of the little cotton chicks and the sugar eggs. Neither of these cost much, and a window full of them with a big sign "Given Away Free"

Mr. Farrington's store decorated for a firemen's tournament.

stopped every one who came along. Of course on the five-cent purchases we made no money, but the people who came in and spent only a nickel were very few.

POPULAR SPECIALS.

At another time I distributed a lot of dodgers advertising candy and bearing a coupon which read as follows: "This coupon is good for seven cents to apply on any purchase of 25 cents' worth, or more, of Huyler's on April 13. Only one coupon taken on each purchase."

This was another case where the acceptance of a coupon with the smallest allowable purchase used up all the profit, but it brought in the people, and they bought plenty of other things, so that the day turned out to be one of our biggest.

Another special offer that I made one Easter was of special candy packages which I priced at 29 cents, some of them being Huyler's that sold regularly at 35 cents. And I offered for 39 cents one of the packages of

candy and a 25-cent bottle of perfume. This was also a winning special.

For Decoration day we decorated a lot of post-cards of the local Soldiers' Monument with little flag stickers such as Dennison makes, and arranged a window display appropriate to the occasion with a stack of arms and some war pictures, flags, etc. We put in a rack of the special post-cards and sold them at one cent each. Another plan we followed was to give free on that day and on the Fourth of July a little flag with a pin on it to every customer. By the gross they cost almost nothing.

The week before commencement at the high school, we decorated a window with crêpe paper in the class colors and filled it with all kinds of goods suitable for graduation gifts. These included fountain pens, perfumes, books, toilet cases, mirrors, etc., etc.

Old home week is another special occasion. One of the best of ways to get the people interested in the store at that time is to use the windows for displays of pictures or relics connected with the history of the town, and to make the store a sort of semi-official registration bureau for all the visitors. Keep a big book in which every one is asked to register his name and the place he is stopping for the week.

Put a sign in the window calling attention to the fact that every one is asked to register there and receive a souvenir post-card of some prominent building. Send notices to every one whose name is mentioned in the newspaper as coming, asking him to come and register. Make the store a place where every one will understand that information regarding the presence of any one else can be determined. Your newspaper will work with you in accomplishing this, and it will make your store the most popular place in town all the week.

I have given two or three plans in previous chapters showing the ways of getting school trade at the opening of school. The school trade should be given careful attention. It pays well.

Labor day, election day, Thanksgiving day, are all suitable for special window displays, though there is not so much business in connection with them.

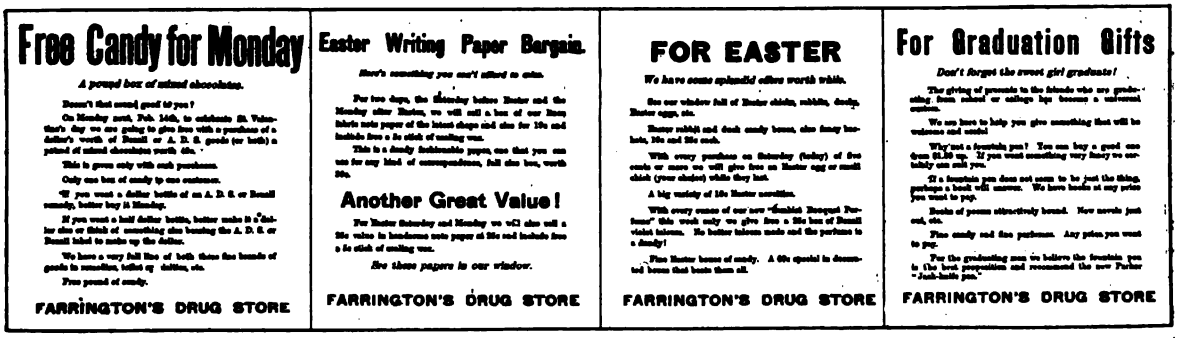
For Thanksgiving it is well to advertise such things as the store keeps that will contribute to the success of the Thanksgiving dinner. Candy, of course, must be remembered, and spices, sage, caraway, etc. Cigars should be mentioned, and, if you keep them, exhibit cards.

Christmas is of course the day that develops the most business of any of the holidays, and I have found the newspapers the best medium for reaching my trade at that time. Special folders and letters are good, but the newspaper reaches every one, and I have doubled or even quadrupled my space for the three or four weeks before Christmas, and taken particular pains with the advertisements, with excellent results. My December business I worked up from $400 to $1750 all with newspaper advertising.

I begin to sell Christmas goods just as soon as certain lines are received. I put them right on display with the regular stock in October and November, and the last of November I get the whole holiday line going. People are being educated now to buy early. I educate myself to sell early.

The advertisements reproduced this time show how the Christmas proposition was handled in the newspapers, as well as how other special seasons received particular attention.

So much for the special seasons, though I



Some of Mr. Farrington's newspaper ads. used at the period in his business career described in the accompanying portion of his autobiography.

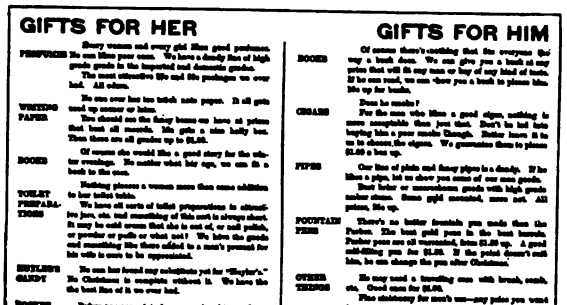
have not gone into details because space does not permit.

FINED AND CALUMNIATED.

It was about this time that the State board sent a detective to town, and he got in some of his fine work on my unlicensed clerk.

The average village pharmacy has no licensed men besides the proprietor. The unlicensed clerk or clerks sell almost everything when the boss is present. And notwithstanding their orders not to sell goods which they have no right to when he is away, they often find it easier to make the sale than to explain that they haven't the right. In most cases, too, the proprietor winks at the practice. I did.

Well, the State board detective came in, and by more or less specious representations induced the clerk to make a sale of tincture of belladonna. I did not know anything about


GIFTS FOR HER

GIFTS FOR HIM

Farrington's Drug Store

A newspaper ad. gotten up for the holiday season.

the sale until the papers in the case were served, and then I found it out too late. There was nothing to do but to settle the matter up quietly, which I did, paying a fine of $75.

It taught me a good lesson and I hope that it may have its effect upon others, so that they will not have to give up the amount of the fine.

Just how the matter reached the newspapers in the town I could not say. Perhaps the fact that a member of the State board was a competitor of mine had something to do with the incident. A news item appeared stating that I had been fined, etc., for violation of the pharmacy law. My judgment was against taking any notice of the matter, but I was unfortunately advised to try to justify myself in the next issue of the paper, and of course what little I could say in justification did not amount to anything and only brought the matter once more to the attention of the public, many of whom had not noticed the original item. Furthermore, it showed that I was "sore" about it.

That one experience has been worth to me what it cost, not only in showing the advantage of living up to the law, but also in teaching me that it is folly ever to rush into the newspapers to try to justify oneself for a more or less reprehensible act.

The man who carries his quarrels into the newspapers is a fool. The man who allows himself to get into a quarrel with a newspaper publisher or editor is also a fool. The fellow with the newspaper has something right at hand that will enable him to come back at the outsider indefinitely.

HELPED BY CIRCUMSTANCES.

Competition began to dwindle, and business kept moving up a notch higher every year. The sales were up to $10,650, when an event occurred that made a good deal of difference with my business and plunged the whole town into a period of gloom. This was nothing less than a hotel fire in which my strongest competitor and his wife lost their lives.

It seems impossible that a three-story country hotel could burn down so quickly that the occupants could not get out, but this was to an extent the case.

The fire occurred at five o'clock on a January Sunday morning, and the druggist and his wife and another village business man who lived at the house lost their lives by suffocation. What few other people happened to be in the building escaped without much clothing by coming down rope fire-escapes.

Right here I want to go on record with the statement that no druggist ever had a better or pleasanter competitor to fight than I had in Billy Winters. There was not a more popular man in the town, and he deserved his popularity. I would far rather have seen my business go to the dogs than to see it succeed by reason of any such catastrophe.

It was not many years after this that the State board man closed up his own store, and a few years later the fourth druggist went south for the winter, shutting up his store for the time.

The Winters store, however, changed hands, and soon reopened with much more modern equipment and better fitted than ever to fight

for the trade which it was apparent was to be divided mainly between the two of us.

STRIKING HIS GAIT.

By this time I had the advantage of being the best established store and much the best stocked. When one has reached a point where he can afford to carry a complete stock and where advertising has begun to bring business in an increasing ratio, things look better. The momentum is easier to keep up.

I found it very profitable to take up special lines and give them attention in the way of advertising. One of the departments that responded well to advertising among the farmers was a line of poultry remedies. The line had high merit, and the makers were willing to coöperate to any extent to develop new business. I furnished them with an up-to-date mailing list, and they kept me supplied with plenty of counter advertising, which we put into the parcels of all known poultry owners.

The fly-killer business, too, we went after strongly.

I did not stop with one line, but carried two or three good fly-killers. Kreso Dip was a continuous and successful seller in the fly season, and in the winter we pushed it to kill lice on stock. All these goods we sold always with an absolute guarantee of satisfaction or money back.

We sent out a demonstrator with fly-killer, and in one day he called upon 23 farmers and delivered to 15 of them a gallon each of fly-killer with the agreement that it was returnable if not satisfactory. A few paid for the can, but most of them were to pay if the goods were right. Of course no one was called upon who was not good pay. The manufacturers agreed to stand behind the guarantee and take back any returned goods.

Another good plan was the spraying of the stock at the county fair in our town with our advertised fly-killer.

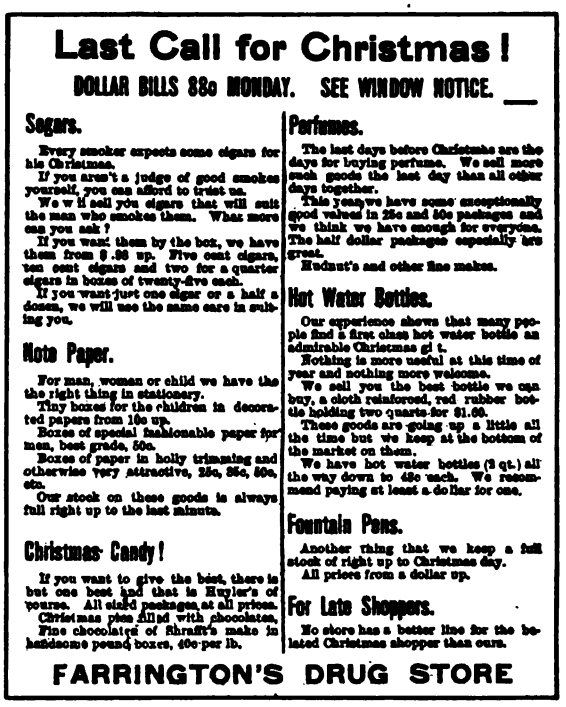
There is little difficulty in getting the maker of a good stock specialty to agree to back up your guarantee if you will give the goods a push and get some business worth while on them.

THE RETURNED GOODS EVIL.

I remember one occasion when we did refuse to refund money on a purchase, and it made the customer mad, though we did not lose her.

One of the physicians bought a fountain syringe for a patient and paid for it, a special rate being made, as was our usual custom.

In a few days the woman brought back the fountain syringe still wrapped just as it had gone out of the store. The package had not been opened, and there would have been no harm in taking it back. But she wanted to return it to us and have us refund the price, the full price, as we could not admit to her that we had made a special rate. We offered to take it and ask the physician about and adjust the matter through him. Or we told her she could return it to him, and we would take


Last Call for Christmas!

DOLLAR BILLS 88c MONDAY. SEE WINDOW NOTICE.

Segars.

Every smoker expects some cigars for his Christmas.
If you aren't a judge of good smokes yourself, you can afford to trust us.
We will sell you cigars that will suit the man who smokes them. What more can you ask?
If you want them by the box, we have them from $1.00 up. Five cent cigars, ten cent cigars and two for a quarter cigars in boxes of twenty-five each.
If you want just one cigar or a half a dozen, we will use the same care in suiting you.

Note Paper.

For man, woman or child we have the the right thing in stationery.
Tiny boxes for the children in decorated papers from 10c up.
Boxes of special fashionable paper for men, best grade, 50c.
Boxes of paper in holly trimming and otherwise very attractive, 25c, 35c, 50c, etc.
Our stock on these goods is always full right up to the last minute.

Christmas Candy!

If you want to give the best, there is but one best and that is Huyler's of course. All sizes packages at all prices.
Christmas pies filled with chocolates.
Fine chocolates of Strauss's make in handsome pound boxes, 40c per lb.

Perfumes.

The last days before Christmas are the days for buying perfume. We sell more such goods the last day than all other days together.
This year we have some exceptionally good values in 25c and 50c packages and we think we have enough for everyone. The half dollar packages especially are great.
Rudnut's and other fine makes.

Hot Water Bottles.

Our experience shows that many people find a first class hot water bottle an admirable Christmas gift.
Nothing is more useful at this time of year and nothing more welcome.
We sell you the best bottle we can buy, a cloth reinforced, red rubber bottle holding two quarts for $1.00.
These goods are going up a little all the time but we keep at the bottom of the market on them.
We have hot water bottles (2 qt.) all the way down to 45c each. We recommend paying at least a dollar for one.

Fountain Pens.

Another thing that we keep a full stock of right up to Christmas day.
All prices from a dollar up.

For Late Shoppers.

No store has a better line for the belated Christmas shopper than ours.

FARRINGTON'S DRUG STORE

Another holiday ad.

it back from him and return to him what he had paid for it. But we explained that we could not give her back the price of it. We did not know that she had paid him for it. This resulted in a disgruntled customer, and while I believe in the Marshall Field maxim that "the customer is always right," still there are exceptions to every rule, and this was one of them.

During all of my store experience I did little advertising for prescription work for the simple reason that there was almost no prescription business in the town. During the years I owned the store our prescription numbers ran from 2187 up to 10,703.

The local physicians all carried nearly all the medicine they used, and sent to us only an

occasional order. I advertised to the physicians and made it a point to carry good goods for their office use, but it was often impossible to meet the prices of the physicians' supply houses without selling a lower quality of goods than we were willing to put out.

Some of those houses sold pharmaceutical preparations at a lower price than they could be made on the market price of the ingredients. Laudanum was one item of this sort. It is unfortunate that in New York State, at least, there is no standard of any kind set for the preparations a doctor hands out.

Fluids made of the discards from reputable houses, under-strength tinctures, worthless tablets—all these are all right when the physician sells them, but if the druggist gets caught doing anything of that sort, out with him quickly!

Still I have no complaint to make about the upholding of the pharmacy laws. I believe them to be just and I believe they should be rigidly enforced. But I believe the public should also be protected from the ignorance or the cupidity of the dispensing physician.

(*To be continued in May.*)

THE BEAUTY EXPERT AT THE CIGAR COUNTER.

Algernon Seeks to Give the New Girl a Lesson in Cigar Salesmanship, Only to Find that She's a Star of the First Magnitude—What Happens when a Customer Comes in for Some of His Favorite Cigars.

By CLEO CONSTANCE LONG.

"Feast your lamps on the new cashier, Clarence, me child," said Algernon to the soda boy one dismal morning when business was dull. "Feast them just this once, and then never again, 'cause I gotta hunch I'm going to tie a tag to that girlie before the week is out."

"Gee, you hate yourself, don't chu?" replied Clarence, "but take it from me, she ain't got nothin' on Miss Grace for looks. I could easy hate the guy that stole away our little Gracie, and the way that girl had the dope on cigars! Spiel off all them foreign names like a reg'lar wop! Bet this girl don't know a straight ten from a two-fer, coming from a department store — toilet goods, mindju — handin' out salve and sachet to the swell dames. What kind of a cigar clerk will she make?"

"Who put you so wise to her past history? Ever know her before?" demanded Algernon.

"All my life," said Clarence, airily. "Naturally, the boss consulted me before he put her in here, and—"

"Aw, wake up! Honest, did she come from one of them lady shops?"

"Yes, and I'll tell you how I know. 'Member last week when Mrs. Boss came in to hold up the old man, and decided to buy some cold cream? Well, Miss Grace had just left, empty was the cage, you were back of the desk, and I was havin' a dull season. The boss called on me to hunt up the chilly cream for the madam, and I had one awful time findin' it too. She wanted a cream called Agnes, or Edith, or Gertrude, or something, and all I could get my mitts on was Emmas and Myrtles. Finally I discovered the right stuff, but all the time I was huntin' the madam was handin' it out to the boss somethin' like this:

"'What you need,' sez she, 'to compete with the department stores in this line, is an experienced salesgirl who knows the tastes of fas-tid-e-yuss wimmen. I don't wonder you lose money on toilet goods,' sez she. 'No one ever comes here for toilet goods but your own wife, as far as I can see, and you can't even find what *she* wants. There is a dandy little girl,' sez the madam, 'in the Ladies' Paradise Store, who knows all there is to know about every kind of toilet goods in the world. She's a clever, obliging little girl, and I believe she could sell extract of onion and persuade you it was odors of Araby,' sez she, or somethin' like that. 'I've heard dozens of women say they go there just because they like to have her wait on 'em. She'll size up their complexions, and tell 'em what particular kind of dope they need, and she is a reg'lar beauty lecturer when it comes to sellin' the goods.'

That's the line of talk she was handin' to the boss all the time I was routin' in the case for the Gertrude, and he just lapped it up like a sponge.

"'Um, hum,' sez he, kinder thoughtful. 'Wonder what they pay her? It might be a good stunt all right to put her in Miss Grace's place.'

"'Well, you need one good live girl in here, and I'll find out her name and present salary from the Consumers' League,' sez Mrs. Boss, and out she goes with her jar of Gertrude."

"How do you know this damsel is the same as those?" inquired Algernon at the end of this monologue, which Clarence had delivered to the accompaniment of the ice-pick.

"Oh, I heard the boss tell her she could make up an order for toilet goods she thought she'd have the most call for—and say! he's the slick guy all right. He's havin' some cards printed for her to send to all her stylish customers, statin' that Miss Josie What's-her-name, formerly of the Ladies' Paradise, is now in charge of the toilet goods at The Pillpenny Pharmacy, and will be durned glad, or words to that effect, to serve her former patrons in her new place. But I'll bet she can't hold down the cigar counter worth a cent," concluded Clarence pessimistically.

"Oh, I'll soon put her wise to that," said Algernon, and he strolled over to the cashier's cage where Miss Josie sat enthroned.

"Good morning, Miss Josie," he said in his best ball-room manner. "We're mighty glad to see a smiling face behind the bars again. Are you going to be the regular organist of the cash register, or just saleslady?"

"I don't know yet exactly what I am supposed to do," said Miss Josie, "except to wait on toilet goods. That's my special line, but when I'm not busy I'm to stay here and make change. Mr. Pillpenny said there wouldn't be much demand for toilet goods at first, but he hoped to increase the trade by employing an expert—that's me," and Miss Josie sent a radiant smile through the cage window, to the complete subjugation of the susceptible Algernon.

"Well, say," said he, "didn't the old man say anything to you about cigars? You see," waving his hand toward the cigar case, adjoining the cashier's box, "the cashier lady is always expected to wait on cigars, especially if she's a—an—an awfully pretty girl, you know."

"Oh, quitcher kiddin'," giggled Miss Josie; "but no one has mentioned cigars to me, and I don't know one cigar from another."

"Guess the boss meant to spring that on you after he'd got you in here," said the wise young man. "But honest, girlie, you'll have to hand out the weed. Miss Grace always did, and married one of our steady smokers only last week."

"You don't say!" exclaimed Miss Josie, with a dawning interest in the possibilities of the cigar trade. "Guess she was a good-looker all right."

"Oh, so so," agreed Algernon, carelessly. "I have seen girls that could make Miss Grace look like an Irish potato," with an admiring gaze on Miss Josie's blushing countenance. "But say, suppose I give you a few pointers on the cigar trade—what d'you say?"

"Oh, would you? It's awfully kind of you to take the trouble," beamed Miss Josie.

"Then let's begin," said Algernon. "It's a pleasure, I assure you. I'll be a customer, and you get behind the cigar case there. Clarence, dear, if you see any customers trying to break in on a rainy day like this, bolt the door, will you, darlin'?"

Clarence grinned, and Algernon approached the cigar case with the air of a connoisseur.

"What is the best thing you have in a straight ten, claro?" he demanded.

"But my name isn't Clara, and a customer has no business calling me by name, anyway," protested the cigar vender.

"You see—just as I expected—it's well I gave you a lesson. A customer would be quite likely to ask you just that question, or he might say: 'Let me have a clear Havana my-dear-o,' and you'd think he was a fresh guy, and get mad. Now a claro is a mild cigar, a colorado-claro is a shade heavier, a colorado is medium, and a maduro is heavy. Do you follow me?" asked the lecturer, pointing out the different varieties as he named them.

"I get chu," replied Miss Josie promptly.

"That's the right answer," approved Algernon. "Now spoze he asked you for a Ruth-shaped Pessimo. What would you hand him?"

"The icy glare, probably," announced Miss Josie.

"There you would be wrong, little one. The kind gentleman would mean no harm—he would only want this style," pointing to a box in the case.

Miss Josie reached in, selected one Ruth-shaped Pessimo, and laid it triumphantly on the counter.

"Never, never," cried Algernon. "Never as you value your life hand a man one single cigar. It's an insult. Set out the box, or grab a handful and strew them out before his dazzled eyes. Maybe he only wants one, but let him pick it out for himself."

"Oh, of course, anybody ought to know that," acquiesced Miss Josie, much crest-fallen; "and then do I hand him a match, or light the cigar for him?"

"By all means NO! That will *not* be necessary," said Algernon, "We couldn't handle the crowds at all if you introduced a stunt like that. Now as to the prices. These over here in this lonesome corner are the 25-cent straights, and you don't have much call for 'em, but it's good business to sell 'em when you can. This lot is 15 cents straight, these two-for-a-quarter, these straight ten, these five, and these measly ones here at the end are two-fers—two for a nickel, but no real sport would use 'em. Gee, bet this is a cigar customer comin' in now—looks like an actor or a drummer. Let's see how pretty you can wait on the gen'l'man, and I'll stick around and help you out if necessary."

"I'm scared to death," whispered Miss Josie, as Algernon slipped into the cashier's cage to be close at hand in time of need.

A prosperous looking individual approached the cigar case, and peered at the boxes with a critical air. "What is your best brand, in a clear Havana perfecto, Tampa made, colorado-claro, straight ten?" he demanded, with the air of a man who has a right to an unequivocal answer.

"Er, ah—Ruth-shaped?" ventured the new girl in a panic, and fencing for time, though delighted to recognize the term "Colorado-claro" out of a mass of meaningless words.

"I said perfecto," repeated the man distinctly, "or club-house. Have you the El Sevillio?"

"Elsie Villier? Elsie Villier?" murmured Miss Josie, thinking how strange it was that so many cigars seemed to involve the good names of women; then, as her frenzied gaze happened to rest on the 25-cent cigars in the corner, her natural salesmanship asserted itself and the accustomed phrases of the department store came trippingly to her lips.

"Oh, I have something here that I'm *sure* you'd like, and I want you to try it," she urged with her most bewitching smile. "It's the very *best* thing we have, and we put it in only for our most exclusive and fastidious customers. I *know* you'll like it. The last man who bought one of these cigars lighted it here at the counter, took one good whiff and turned right around and laid down a dollar for four more. It's a quarter straight, but you'll think it's well worth the price after one application, I mean one-er puff. I'm sure you will not be satisfied with anything but the very best." Miss Josie's ingenuous smile seemed to indicate that she felt herself in the presence of a prince. "And this *is* fine. It's perfectly *delicious,* fragrant, and *so* lasting! A direct importation, too. You won't find *this* line in any other shop. We have the exclusive agency, and really we can hardly supply the demand. You know how it is when once the society people take a thing up? Well, now all the society women—I mean, of course, the men—are just crazy over this cigar."

While orating thus glibly the former beauty expert of the Ladies' Paradise laid before the dazzled eyes of the would-be smoker half a dozen of the exclusive 25-cent straights. In a hypnotic state he pocketed four of the cigars, laid down a dollar bill, took one last long lingering look at the siren behind the counter, and departed. Miss Josie turned to her late preceptor for approbation, only to find that Algernon and Clarence were falling on each other's necks in a state of extravagant ecstasy.

"And *you* undertook to teach *her* how to sell cigars!" murmured Clarence, in complete surrender to the capabilities of the new cashier.

"And *you* thought Miss Grace was some dope-slinger!" gasped Algernon. "I'll take off my hat to you, Miss Josie," he continued. "You could make any gink believe that a Wienie sausage was a straight fifty-cent smoke, if you set your mind to it. The only trouble I anticipate is that the beauty expert is going to be so busy at the cigar counter that all the women of this town will lose their good looks for lack of expert consultation."

But Miss Josie had retreated to her cage and was ringing up her first sale of one dollar in the Pillpenny Pharmacy.

"MY BEST PAYING SIDE-LINE."

The Second Article in an Important Series by Different Druggists, in which Each Tells what Class of Goods has Paid Him Best—In This Store Kodaks and Photographic Supplies Brought the Business.

By JOSEPH C. C. WILKINSON,
Eglinton, Ontario.

Side-lines in the drug business have increased greatly during the past few years. This necessitates the greatest care in making them a paying asset to the business.

TRADE BUILDERS.

Kodaks and photographic supplies are the leading side-line in our business, not only from a money-making standpoint but also as a trade builder. Then, too, the stand of the

Joseph C. C. Wilkinson.

manufacturers to have a price protection is what we have been looking for in our own pharmaceutical lines.

The work of taking and finishing a picture has been so simplified as to be readily understood by a school child.

The advertising matter of the Eastman Kodak Company is strictly up to date and of an elevating character.

A kodak window display is always interesting to the passer-by and in most cases brings in a customer. Should his one purchase be only of a developing powder, we have a chance to show him something either pertaining to photography or some other line in our store.

Since kodaks interest people of all ages, we are enabled to secure through their medium the patronage of each member of a family.

During the summer months we devote one window entirely to the display of kodaks. We change the arrangement and advertising matter each week. In the winter we make a full window display every two weeks, and the supplies are constantly on show in the store.

A KODAK CONTEST.

A kodak contest, however simple, will hold a customer and inspire him with a desire for better results. He will try again, and each effort brings him to our store for more supplies. We have found the following contest proves satisfactory. Each month a new subject is chosen and adds zest to the trials of our customers:

A coupon is given to each purchaser of kodak supplies entitling him to enter a picture in the contest. Conditions for our December contest were as follows:

Subject: Winter Sports.

1. Work must be strictly amateur.
2. Prints must be mounted.
3. Coupon must be attached to back of mount.
4. Entries must be in before Dec. 30, 1911.
5. Pictures will not be returned.

Prizes:

1. Brownie No. 2, or supplies value $2.00.
2. Brownie No. 1, or supplies value $1.00.
3. Portrait attachment.

The entries were numerous, and all promised to try again for the ensuing months.

PROFITS AND RETURNS.

We make 32 per cent profit on the sale of a kodak, which is only the beginning, and then follows a long list of supplies at from 20 to 40 per cent.

The first successfully finished picture brings the longing to enlarge, redevelop, retouch, tint,

and the many other attainments of the more advanced artist.

Such a contest conduces to salesmanship on the part of the clerk. One taking an interest in the work has a subject worthy of his interest. Although it requires some study and actual work to enable him to talk it intelligently, he should take pleasure in adding to his knowledge of the subject.

Any information imparted to the customer is listened to with marked attention, and he will come back for more. Herein lies the chance for a salesman. Show the customer how simple it all is, and take the money.

MY PERSONAL EXPERIENCE WITH SHOW CARDS.

How Signs are Made—Practical Hints About the Paper, Ink, and Brushes—Several Specimens of the Author's Own Handiwork.

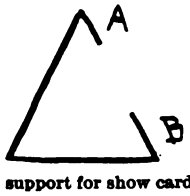
By ALEX F. PETERSON,
Missoula, Mont.

I have been deeply interested in the articles on card-writing which have recently appeared in the BULLETIN, having picked up some pointers from all of them. I give my experience in the hope that they may prove of some value to others.

There can be no question about the value of show-cards as an advertising medium. They can hardly escape the notice of a customer, and frequently prompt an inquiry into the merits of the article advertised, so that by a little further talk a sale is made which otherwise would not have been possible.

First, as to stock. I find that a two-ply kid finish wedding bristol is by far the most satisfactory. Having an extremely hard surface, it does not show the slightest trace of erasures, and the cost, five cents per sheet of 22 by 28 inches, is very little more than that of ordinary bristol. For mounting the cards, a ten-ply ripple mount is excellent, and can be had in many beautiful colors.

As a support for the cards, I use a strip of heavy cardboard about one and one-half inches wide and a little longer than the height of the card, and bend as shown in the following illustration:



A support for show cards.

By fastening the ends marked A and B to the back of the card with gummed strips, a firm support results.

As to brushes, I have found none that are as satisfactory as Eberhard's black sable card-writers' brush. The hair is of just the proper length, and has the right spring to produce smooth, even edges.

After experimenting with many kinds of colors, powders, pastes, and liquids, I have found that the fresco colors which come in glass jars give the best results and are the most economical. They can be had in many colors; but with white, black, red, blue, and yellow, one can produce, by proper mixing, any desired shade.

Flower decoration done in colors by the author.

These colors are rubbed up in a mortar with a mixture of acacia one part, glycerin one part, and water eight parts. Then they are transferred to ointment jars. When they are to be used, it may be necessary to stir in a few drops of water to bring the mixture to the proper working consistency.

Most of the lettering shown in the accompanying illustration is single-stroke, and can be executed nearly as rapidly as writing.

The flower decoration shown in the cold cream card is easily done by painting in groundwork first, and outlining petals and leaves in black with a very fine brush.

Recently I used on a sign an enlarged copy of an etching which appeared in a drug journal. It showed a woman applying a cosmetic and was merely a bust outline in black. The lower portion of the oval in which the figure appeared was clouded by rubbing dry color over it with a small piece of cotton.

The card devoted to velvet cream and shown in one of the illustrations is used for a window

The figure in this sign is a cut-out from a magazine ad.

flasher. The dark lines are made by cutting out the cardboard and pasting tissue-paper on the back, making a pretty effect at night. During the day it has the appearance of painted lines.

I have also made signs for the flasher by painting the words prominently in broad let-

The dark line border in this card is made by cutting out the cardboard and pasting colored tissue-paper on the back.

ters, making holes in these letters with a belt-punch, and backing up with tissue-paper.

Often a bottle of an article advertised is attached to the card. Sometimes this can be done to advantage.

No. 3 has a picture cut out of a magazine. The picture was pasted on the card. This is one of the quickest and easiest ways of adding to the attractiveness of show-cards. By using a border around them, or rubbing a little dry color on the card before pasting on the picture, the effect is improved.

After a little practice, the making of show-cards becomes more of a pleasure than work. Even a novice will soon be surprised at the selling force of the cards he can make.

WHO IS RIGHT?

By MAXWELL BUKOFZER.

Three druggists who met at their meeting room,
Discussed their ways to make business boom.
The first one, a Yankee, tall, nattily clad,
Said: "Fellows, granted that business is bad,
My maxim is: 'Quietly hand to your trade
What the public demands; thus your boom is made."
And he kindled a match on his boot while he spoke,
And blew in the air a ringlet of smoke.

The next one, a German, bald-headed and stout,
Disdainfully dropped his lip with a pout:
"Sell stuff and be ignorant what it contains—
How it *does* attract a man that has brains!
Make money for people I never once saw—
Great task for a druggist, diplomed by the law!"
And he laughed and his voice was angry and loud,
And he puffed as in protest a mighty cloud.

The third one, eyes black, and of scant repose,
Proclaimed his race by the curve of his nose.
Quoth he: "Your ideas are barren of news,
I do not agree with you and your views.
My trade gets mainly what I prepare,
But if they want nostrums—well, I don't care.
I sell what they wish if I must, but I try
To show them the value of what they buy."

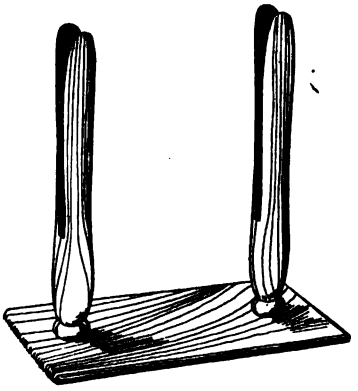
Just then another druggist appeared.
Bedad! you might guess where this one was reared.
"Say, Pat," cried the three to the man in the door,
"What's *your* idea of booming a store?"
Pat listened to what the trio would try,
Then he said with an Irish gleam in the eye:
"Begorrha, me boys! I'll answer ye square,
Just wait till meself I'm a millionaire!"

DOLLAR IDEAS

A CONVENIENT PAPER HOLDER.

George TeLinde, Cleveland, Ohio: I submit a crude sketch of a little device I have found useful around the prescription counter. It can be used for holding powder papers, memoranda, and prescriptions when one is compounding them. It also holds show cards, price cards, etc.

Take two ordinary wooden clothespins,



place them two or three inches apart, and fasten them upright to piece of cigar-box board, using two cigar-box tacks to each pin.

It is very simple to make different sizes to suit your convenience, and the device can be improved by tilting backwards by tacking a strip of wood to the front edge.

THE FIRM NAME ON THE SIDEWALK.

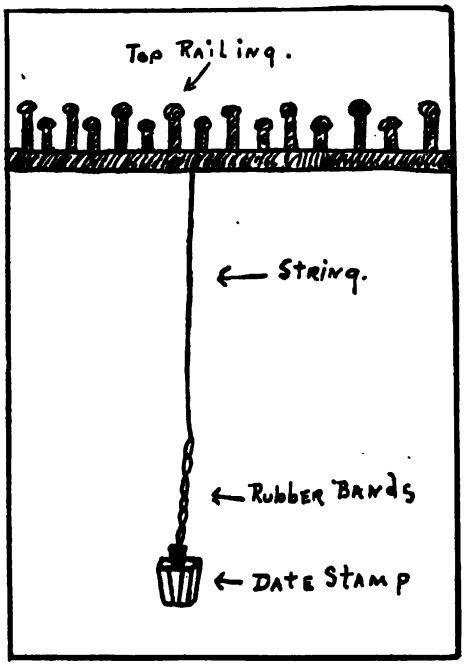
Royal Gulley, Gowanda, N. Y.: When we came to have a cement walk laid in front of our store last summer it occurred to us that we ought to have our name on it. So we wrote a number of firms to see whether they could furnish us with the name in tile. We found they had just such a tile; they used it in hotel corridors, bath-rooms, etc. They said they could make up a sign with this kind of tile for $7.50, the size being 2 by 7 feet, and this is the one we now have in front of our store.

When it came I had the cement men take it, and they made a block of cement the same size and about 6 inches thick and set the tile on top in the cement while soft and let it harden. Two or three weeks later they laid the walk, putting the sign in position first and making the rest of the walk around it. They were wise enough to put tar paper around the sign, between the fresh cement and the old, so that if one happened to settle a trifle, it would not disturb the other. As a matter of fact, the sign has settled a very little at one corner, but it has done no harm since we used the tar paper. The sign is about one and one-half feet out from the store and extends lengthwise with the walk. It bears the single word, "Gulley's."

In all the sign cost about $12, and it is worth more than anything of the kind we have. People cannot help seeing it as they pass by. The border is made of green tile, square in shape, and one-half inch in width. The name is made up in green round tile, and around the name is white round tile; so it shows the name off in good shape.

TO KEEP THE DATE STAMP HANDY BUT OUT OF THE WAY.

H. Kalliwoda, San Francisco, Cal.: To have the date stamp where it is always within easy reach, I attach a string to the top railing of the prescription desk. To the end of the string



I fasten a dozen rubber bands and to the end of these I attach the stamp. When the stamp is needed, pull it down, use it, and let go. It will spring back out of the way.

PROFITS AND EARNINGS

A BRITISH COLUMBIA BUSINESS.

A druggist in British Columbia submits the following statement for analysis:

	1910	1911
Stock	$2476.77	$3270.95
Fixtures	1625.02	1625.02
Purchases		4886.27
Clerk's salary		780.00
Proprietor's salary		1800.00
Rent of store		720.00
Telephone		50.00
Light		75.00
Fuel		40.00
Taxes and insurance		100.00
		$3565.00
Total cash sales		8971.05

This individual is doing extremely well. He is paying his clerk $65 a month and is drawing $150 a month salary out of a business of somewhat less than $9000 a year. In addition to that he increased his stock from $2476.77 in 1910 to $3270.95 in 1911, a gain of $794.18 after all the expenses were paid. Of course the percentage of net profit is not high, due to the fact that the proprietor is drawing a somewhat comfortable salary considering the size of the business.

The ratio of net profit is $794.18 divided by the sales $8971.05, or 8.85 per cent. The ratio of expense is the total $3565.00 divided by the sales $8971.05, or 39.73 per cent. Every drug store should yield a net profit of 10 per cent on the sales if the business is properly conducted. The average expense of doing business for a druggist is 30. The reason why in this case the net profit is somewhat below standard and the expenses above it, lies in the fact that the proprietor is drawing a salary of $1800 a year which goes into expenses. Ordinarily if a drug store does not yield 10 per cent net after all expenditures have been considered, the returns are insufficient.

AN INDIANA STATEMENT.

A proprietor in Indiana submits the following statement for analysis:

Sales, 1911	$10,037.45	
Inventory, Jan. 1, 1912	1,857.62	
Expenses, 1911	3,000.00	
Purchases, 1911	1,366.97	
Proprietor's salary	1,000.00	

Our estimates are as follows:

Inventory, Jan. 1, 1912	$1,857.62	
Inventory, Jan. 1, 1911	1,366.97	
	$490.65	Increased stock.
1911		
Expenses	$3,000.00	
Purchases	5,510.22	
	$8,510.22	Expenditures.
Sales	$10,037.45	
Expenditures	8,510.22	
	$1,527.23	Gross profit.
Salary	1,000.00	
	$527.23	
	490.65	Increased stock.
	$1,017.88	Net profit.

This man is doing very well, making a net profit of about 10 per cent a year. His stock increased $490.65 during 1911, as is evident from a comparison of the inventories at the beginning and end of the year. He spent for help and goods $8510.22. Subtracting this expenditure from the sales, $10,037.45, we have left a profit of $1527.23. Substracting the manager's salary of $1000 leaves a profit of $527.23. To this should be added $490.65, the increase in stock, giving a total net profit of $1017.88. This is approximately 10 per cent of the sales. The percentage of expense of this pharmacist is about 30, which is the usual average.

A PROFITABLE BUSINESS.

A druggist located in a small Wisconsin town submits his business statements for the years 1910 and 1911. He adds: "I am doing a strictly cash business. I have no bad accounts, but I am losing money in not taking advantage of discounts. In the past I have never discounted a bill. But this year I have borrowed the money and will pay cash for everything that comes in the store. My expenses are large, as they include both those of my home and the store.

	1910.	1911.
Inventory	$3875.18	$3806.04
Sales	9648.82	8265.89
Purchases	5868.93	5003.41
Expenses	2402.71	2484.40
Debts	1191.76	1125.50

Our own opinion is that this proprietor should have retrenched a bit on seeing that

his sales were falling off. As a matter of fact his expenses were over 80 dollars more during 1911 than 1910. In an off year economy should be the watchword. His sales were $1381.93 less in 1911 than in 1910. Naturally this affected his profit, as is evident from the following simple calculations:

	1910.	1911.
Purchases	$5868.93	$5003.41
Expenses	2402.71	2484.40
Total disbursement	$8271.64	$7487.81
Sales	$9648.82	$8265.89
Disbursement	8271.64	7487.81
Net profit	$1377.18	$778.08

His net profit, as is shown in the foregoing figures, was $1377.18 in 1910, but only $778.08 in 1911, a decrease. He has not reduced his indebtedness substantially. True, he owed $66.26 less in 1911 than 1910, but then his stock was $69.14 less.

Still our Wisconsin friend is doing very well. In 1911 his percentage of net profit was $778.08 ÷ by 8265.89, or 9.41 per cent. In 1910 it was 14.27 per cent, as may be seen by dividing the net profit of $1377.18 by the sales for that year, $1377.18. Obviously his earnings have fallen off, but it is to be hoped that 1912 will see the business resume its former proportions.

Speaking of earnings, it is hard to tell how much our friend is making because he doesn't itemize his expenses. If they are in the main personal, he is doing very well. They must include his salary. The store expenses should be itemized and be differentiated from the household expenditures, so that we could tell where our friend is at.

His determination to discount all bills even if he has to borrow the money to do it is, of course, very commendable.

A NEW STORE.

An Oklahoma pharmacist bought a new store not long ago. After nine months, he showed the following statement:

Bills receivable	$ 127.50
United Drug Co. stock	100.00
Stock	1943.17
Fixtures	1649.70
Cash	160.00
Bills payable	749.91
Note at bank	800.00
Labor account	224.05
Personal account	602.45
Expense account	693.20
Expense account, soda fountain	85.25
Goods purchased, including fixtures	6849.32
Freight account	175.81
Cash discount	36.17
Cash sales	5787.00
Cash invested, including above note of $800.00.	2441.10

We have divided this statement, for the purpose of convenience, into three parts: assets, debts and expenses. In the assets we include:

$ 127.50	Bills receivable.
100.00	United Drug Co. stock.
1943.17	Stock.
1649.70	Fixtures.
160.00	Cash.
$3980.37	Total assets.

The debts comprise bills payable $749.91 plus the bank note $800.00, totaling $1549.91.

The expenses consist of:

$ 224.05	Labor.
602.45	Personal.
693.20	Expenses.
85.25	Fountain.
175.81	Freight.
$1780.76	Total expenses.

Subtracting the debts from the assets, $3980.37 less $1549.91, gives $2430.46 net assets or the man's equity in the business. Since he invested $1641.10 of his own money in the business, we subtract that amount from his assets to get the profits. In other words, $2430.46 minus $1641.10 equals $789.36, the gain for the year. His personal investment was determined by subtracting the amount of his bank loan from what the statement shows was invested; or $2441.10 less $800.00 equals $1641.10. He allowed himself about $77 a month salary the first nine months.

Dividing the expenses by the sales, $1780.76 divided by $5787.00, equals 30.77%. Freight might better have been charged to purchases, as it is part of the cost of the goods. His percentage of profit ran 13.64, as may be seen by dividing $789.36 by the sales $5787.00. Considering that he allowed himself a fair salary, this proprietor has done very well. A profit of 13.64 per cent is very good for a new business or even for one long established.

If the sales develop and the percentage of profit be maintained, this proprietor should have a good stand some day. JNO. H.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

TINCTURE OF IODINE.

To the Editors:

In the February issue of the BULLETIN, on page 49, I read an editorial about certain preparations which had been found not up to U. S. P. standard. Having noticed that tincture of iodine was one of the preparations under fire, I offer the following suggestion for the manufacture of this well-known article.

The fact that such a large percentage of tincture of iodine samples examined were found below U. S. P. standard leads me to believe that the iodine and potassium iodide were in most cases not entirely dissolved when the tincture was sold or offered for sale. There is no doubt in my mind that the usual way in which tincture of iodine is made is as follows: The required amounts of iodine and potassium iodide are placed in a bottle and enough alcohol added to make the proper volume of tincture. The bottle is then shaken a few times and set aside with the expectation that in a short time all of the solids will have dissolved. A few shakes of the bottle, it is assumed, are all that is needed to produce a U. S. P. tincture of iodine.

There never was a grosser error. I know from experience gathered by conducting experiments that iodine and potassium iodide will dissolve very slowly when treated in that way. I have seen cases where the iodine and potassium iodide remained undissolved in a bottle of alcohol even after they had been mixed for a period of two weeks, and the mixture had occasionally been agitated. Having learned this I decided to try the following method for obtaining a full-strength tincture of iodine:

A glass funnel of suitable size was placed in the neck of an accurately graduated bottle and a pledget of cotton moistened with alcohol was placed in the neck of the funnel. The required amount of potassium iodide, 50 grammes for 1000 Cc. tincture, was weighed and placed on top of the cotton. The required amount of iodine, 70 grammes for 1000 Cc. tincture, was next weighed and placed on top of the potassium iodide. Alcohol was then poured over the mixture in the funnel and allowed to percolate through the mixture into the graduated bottle until the proper volume of tincture of iodine had been obtained.

By the use of this method 1000 Cc. of a perfectly clear, clean, and strictly U. S. P. tincture of iodine can be obtained in about half an hour. I advise every pharmacist who has had any difficulty in preparing a satisfactory tincture of iodine to try the foregoing method.

E. A. GEYER.

South Bend, Indiana.

SOME HELPFUL DISPENSING HINTS.

To the Editors:

In making Churchill's tincture of iodine I use the glass barrel of a vaginal syringe. Dissolve the tincture of iodine in the smallest amount of water, add alcohol, put the iodine in the tube, and let circulatory displacement do the work. In that way one does not use any time to rub up the iodine, nor does he leave part of it in the mortar. After standing out for a while in a warm place, or over night, the iodine is all dissolved. Immerse the tube only about ¼ inch in alcohol.

Some time ago I saw an article about citrate of magnesia keeping well by adding half of the potassium bicarbonate at once, and corking the bottle until called for; then adding the remainder. I have tried this plan and found it does very well. The slight amount of gas generated prevents the flocculent growth which is apt to form when the potassium bicarbonate is omitted entirely.

I use small rubber bands for putting up bundles of six or seven powders, before placing them in the box, and thus save the patient's temper by not having 20 or 30 powders flying out of the box when he tries to get one out. I use the bands for bottle caps also. They save a lot of time and look better than thread or string.

In dissolving bromides, I dissolve the salt in a little distilled water, then add medicated water or use all distilled water, and add the oils and shake. Either way makes a clear solution, but the latter method requires running the fluid through a filter or cotton to take out the excess oil.

When receiving a new bottle of acid, I take time to open it by warming the neck in a Bunsen flame or friction against string, instead of waiting until I have a call for the acid. This saves time and prevents broken bottles. Trying to open the package while customers wait is very apt to result in broken stoppers or bottles, or both. And since most jobbers charge 15 to 25 cents for bottles, this precaution helps buy a few more cigars, or maybe some shoes for the baby.

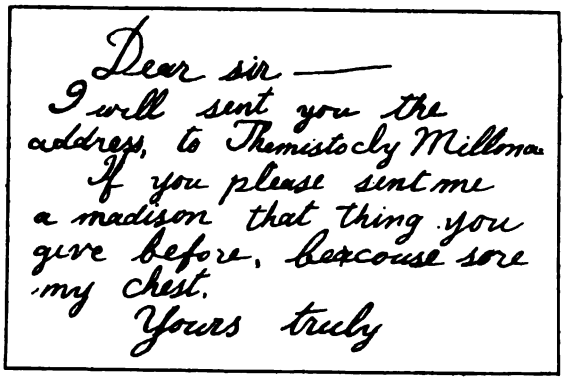
I read the BULLETIN when it arrives here and think I get more good things from it than from any other journal! C. A. SIEPLEIN.

Cleveland, Ohio.

FROM A SICKA DA MAN.

To the Editors:

I am sending you herewith an amusing letter which I picked up recently in a store



Dear sir —
I will sent you the address, to Themistocly Millona
If you please sent me a madison that thing you give before, because sore my chest.
Yours truly

which has quite a large Italian trade. Evidently it came from a "sicka da man."

Roxbury, Mass. J. E. MULLEN.

HE HAD TO BE CONSISTENT.

To the Editors:

While forwarding my subscription, let me relate an amusing incident that occurred recently in our pharmacy.

A lady entered one afternoon leading a dog that she wished us to kill, as it had become a nuisance. It appears that the corporation official had not been highly polished in his manner towards her, and that, together with the grief at parting with a family pet, made her more than ordinarily excited, or shall I say concerned? Poor body, she desired to know whether the dog would die, and whether she could be thoroughly assured it would not come home again.

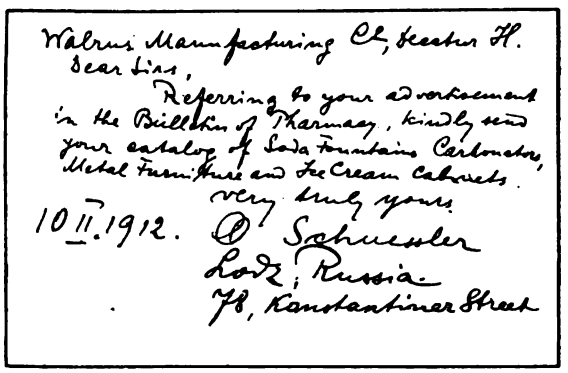
We assured her the dog would die quickly, and that death would be painless. Right. We killed the dog with prussic acid, and had no more than finished the unpleasant duty when the messenger boy came out to the back saying, "Shop, sir, a lady wants you."

Without waiting to wash my hands I went straight to the counter, and sure enough, there was a lady, but different from the former. The new arrival informed us she was collecting on behalf of "The Cruelty to Animals Association." Well now, that was a contradiction to all of my doings. I'm past the blushing stage, but can still see the humorous side of the question, and told the energetic collector of my latest action, saying I could not see my way clear to subscribing as by so doing my donation would be in direct opposition to my action. However, the lady collector was very much concerned, and said she would call another day. CHAS. PALLISER.

Wellington, New Zealand.

A RUSSIAN READER HEARD FROM.

At intervals we receive communications that serve to show the world-wide circulation of the BULLETIN. Recently, for example, the Walrus Manufacturing Co. forwarded to us a post-card received from one of our Russian readers. We take pleasure in reproducing it:



Walrus Manufacturing Co, Detroit Mich.
Dear Sirs,
Referring to your advertisement in the Bulletin of Pharmacy, kindly send your catalog of Soda Fountains Carbonator, Metal Furniture and Ice Cream Cabinets.
very truly yours
10.11.1912. O. Schuessler
Lodz, Russia
78, Konstantinow Street

Commenting on this inquiry from far-off Russia, the Walrus Manufacturing Co. writes:

THE BULLETIN OF PHARMACY,
Detroit, Mich.
Gentlemen:

The enclosed inquiry should be of interest to those who are advertising in your publication.

We get more foreign inquiries through THE BULLETIN OF PHARMACY than from all other trade journals.

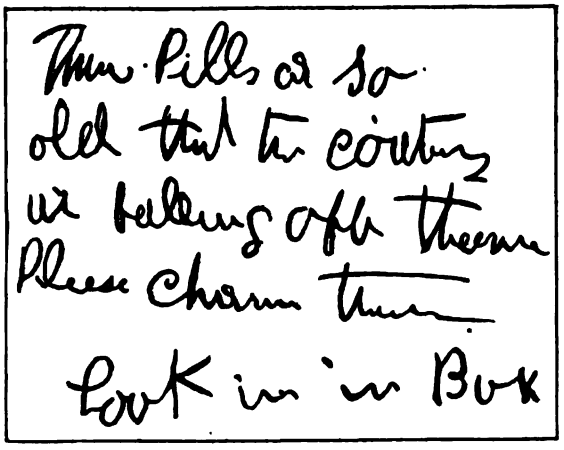
Yours truly,
WALRUS MANUFACTURING CO.,
L. G. Gray, Sec'y and Gen'l Sales Mgr.

Verily the BULLETIN OF PHARMACY is a world journal.

SHE WANTED THE COATS ON!

To the Editors:

I have greatly enjoyed the funny orders which have been appearing in the BULLETIN OF PHARMACY during the last five or six years. The other day a child wanted a box of Brandreth's pills. Without asking her any



questions, I gave her the uncoated pills. They were promptly returned with the enclosed note. This ought to make a pretty good State board catch question! JOSEPH A. SCHMIEG.

Philadelphia, Pa.

ANOTHER MAN BELIEVES IN IT!

To the Editors:

I have read several letters in the BULLETIN OF PHARMACY suggesting the establishment of a druggists' death benefit association. I also observed your editorial in the January number. I think this is an excellent idea, and I am sure a number of other druggists feel the same way about it. Merely thinking about a good thing, however, doesn't accomplish much. *Doing* is what counts.

I am interested in knowing how many of your readers think favorably of this plan. I would like to know how many of them would go into it, and what their ideas in regard to it are. A. W. MEIER.

Van Buren, Ark.

A CONUNDRUM.

To the Editors:

I cannot resist the temptation to ask you a query: Why is an up-to-date pill-twirler like a hunter attacked by a tiger? Because both must get their bullet-in.

North Paterson, N. J. MAXWELL BUKOFZER.

FLORAL DEPARTMENT.

We want to say that we enjoy very much reading the BULLETIN. We consider it the best magazine that comes into our establishment. KANE DRUG COMPANY.

Kane, Pa.

I find the BULLETIN the climax of magazines pertaining to pharmacy, and every number is a source of valuable information to me.

Aylmer, Ontario. E. A. RICHARDS.

We get more information and general knowledge from the BULLETIN than from any other magazine which we receive.

Morgan Hill, Cal. HUBERT H. BEARCE.

I have been a subscriber to your journal for the last two years and will never be without it.

Passaic, N. J. B. ROOD.

The BULLETIN is the liveliest paper I get, and I miss it sadly when it does not reach me.

Eltham, Tarawaki, New Zealand. MORITZ MARK.

The BULLETIN OF PHARMACY is the best little drug journal published!

Detroit, Mich. J. F. PADDOCK.

I find the BULLETIN very interesting and do not wish to be without it.

EDGAR L. HOLDEN, Ph.C.

W. Philadelphia, Pa.

I consider the BULLETIN the best of all monthly magazines I read.

Chicago, Ill. ANTHONY J. ORTH.

Oh, you BULLETIN! How could we ever keep house without you!

Maywood, Ill. WAKEFIELD'S.

Find enclosed 12/- subscription for best pharmacy journal known! T. WALKER.

Winton, N. Z.

Your BULLETIN is as welcome as the flowers in May! LIEN'S PHARMACY.

Tacoma, Wash.

Your journal is worth many times the price to me. W. H. LAUD.

Gilliam, Mo.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Snowed In.—

The weather during the past winter was unusually severe. When the rigor of the February cold began to abate, up came a blizzard that fairly crippled the west. There was a heavy snow fall, which, aided by high winds, formed huge drifts, and in many places traffic was completely blockaded.

Frank G. Farrell, who conducts a drug store in

Munising, Michigan, on Lake Superior, came down to the store one morning and found that two people had shoveled their way through the snow-bank to gain entrance to his store. Lest some of our southern friends are inclined to doubt this statement, we produce the accompanying illustration of Mr. Farrell's store shortly after the snow-storm. Unfortunately the shovelers were disappointed in not being able to discover a night clerk and were compelled to wait until Mr. Farrell arrived. This only goes to show that you can't keep

the people away from a good drug store. Mr. Farrell took advantage of the opportunity to place a sign on the top of the snow-bank, as shown in the engraving.

In the west the blizzard was equally severe. The Santa Fe and Rock Island, and in fact all the railroads, and the through California trains, were held up several days. It is needless to add that customers of the druggists had considerable difficulty in making their way to the stores. In many cases the snow was piled as high as the second story.

A First-class Soda Ad.—

L. L. Bunnell, proprietor of the Norwood Pharmacy, of Norwood, Ohio, upon the annual "opening" of his soda fountain, distributed a copy of an announcement to every house in the town. There were four pages, the paper being a heavy white stock four by six inches in size. On the top of the cover page was embossed the word, "Announcement." Underneath appeared the invitation:

Bunnell

Invites you and the members of your family to be present at his

NEW SODA FOUNTAIN OPENING

Thursday, June 29, 1911

N. W. Cor. Main & Maple Aves.

Our newly installed Soda Fountain is the finest, largest and best equipped fountain in Norwood, and on that day we will serve Ice Cream and Soda free to our visitors.

The inside pages contained a soda menu, while the back cover read as follows:

In presenting this invitation to you, we desire to express our appreciation of your friendship and patronage in the past. We have aimed to furnish you with the best and purest drugs, the highest quality of drug sundries, and in every way endeavored to merit your good-will.

This drug store is your drug store and our services are yours for the asking. We have had this model soda fountain built so that you can say that Bunnell has the best drug store, the finest soda fountain and the best soda that can be found in Norwood. So when you want pure drugs or soda—

"Get it at Bunnell's"

This announcement proved a winner and brought a lot of new faces to the store.

A First-class Ad.—

Our attention has been directed to an excellent piece of advertising distributed by B. S. Cooban & Co. of Chicago. In size and general appearance it is patterned after a page in the newspaper, being a foot and

COOBAN'S FEBRUARY DRUG SALE

Friday and Saturday, February 9th, 10th

Free Perfume, Free Cigars, Free Candy, Free Surprise Bag

Bargains in Hot Water Bottles

Special Sale of Soaps

Many Interesting Price Attractions on Talcum Powders, Tooth Powders, Cold Cream, etc.

PRESCRIPTIONS Most Accurately Compounded

Cooban's Rose Cold Cream

J. S. COOBAN & CO.

a half wide and two feet long. The stock, however, is heavier than that of an ordinary newspaper, having a somewhat glossy surface. The ad. was gotten up to announce Mr. Cooban's February sale.

A Firm Stand on "Refills."—

The Oglesby Drug Company, located at the corner of 31st Street and Indiana Avenue, Chicago, is essentially a prescription store. It has always been an ethical pharmacy, and has made it a rule to send sick people to the physician whenever that is possible. Recently in a little illustrated booklet this firm announced its position on the subject of refills in no uncertain terms. To quote:

ABOUT REFILLING PRESCRIPTIONS.

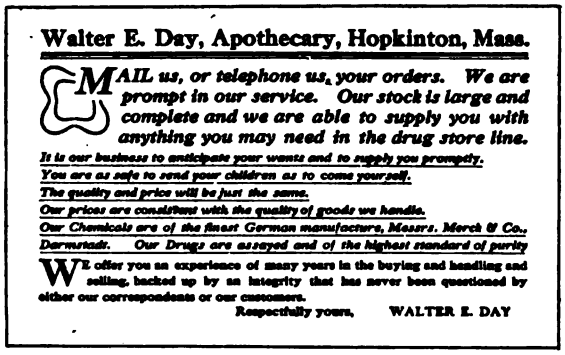
We are willing to refill your prescription if your Physician is willing. Permit us to caution you not to have a prescription refilled if your Physician objects. When a Physician prescribes a medicine it is for a certain condition of the system at that time. The condition changes from day to day. If you have a prescription refilled you assume the condition to be the same as when the Doctor prescribed, while in fact it may be entirely different. The greatest skill of the Physician is judging the patient's true ailment. Noting the effect of medicine is an aid to him. If his patient has a prescription refilled indefinitely without consulting the Physician it is impossible for him to profit and benefit the patient by knowledge gained from watching the effect of medicine previously prescribed. Thus the patient often hinders himself from getting well as rapidly as he should.

If you are sick enough to consult a Doctor, give the doctor a fair show by asking him before you get the prescription refilled.

The foregoing announcement appeared conspicuously on a white enclosure that was inserted between the leaves of the tan-colored brochure.

A Mailing Card.—

Walter E. Day, of Hopkinton, Mass., uses a mailing card for soliciting telephone business. It is 5½ by 3½ inches in dimensions, and is printed on a somewhat


Walter E. Day, Apothecary, Hopkinton, Mass.

MAIL us, or telephone us, your orders. We are prompt in our service. Our stock is large and complete and we are able to supply you with anything you may need in the drug store line.

It is our business to anticipate your wants and to supply you promptly.

You are as safe to send your children as to come yourself.

The quality and price will be just the same.

Our prices are consistent with the quality of goods we handle.

Our Chemicals are of the finest German manufacture, Messrs. Merck & Co., Darmstadt. Our Drugs are assayed and of the highest standard of purity

WE offer you an experience of many years in the buying and handling and selling, backed up by an integrity that has never been questioned by either our correspondents or our customers.

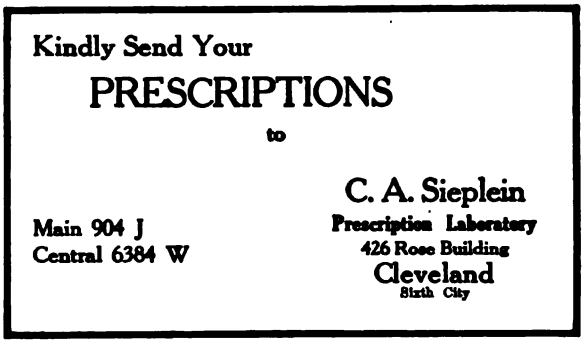
Respectfully yours, WALTER E. DAY

A mailing card used by Walter E. Day of Hopkinton, Mass.

heavy post-card stock. It was mailed with one-cent postage and bears the message shown in the accompanying reproduction.

A Store Blotter.—

Blotters are commonly employed by druggists to keep their names before their customers. C. A. Seiplein, of Cleveland, Ohio, is a believer in this form of


Kindly Send Your

PRESCRIPTIONS

to

C. A. Sieplein

Prescription Laboratory

426 Rose Building

Cleveland

Sixth City

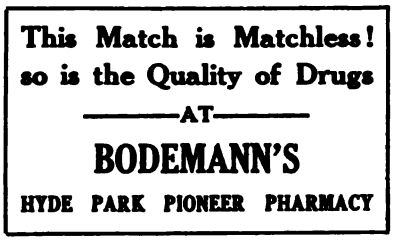
Main 904 J

Central 6384 W

advertising. He distributes a blotter 6 by 3 inches in dimensions, one side of which bears his advertisement. The paper is of a salmon color, the lettering being done in green.

Matches with Druggist's Card.—

William Bodemann, of Chicago, reports that matches sell very well. He has his own brand, as may be seen from the accompanying reproduction of the label on


This Match is Matchless!

so is the Quality of Drugs

—AT—

BODEMANN'S

HYDE PARK PIONEER PHARMACY

the box. Mr. Bodemann reports that he uses safety matches of the best quality. The sides of the box are coated with a composition which enables the user to ignite the matches readily.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Pregnant Paragraphs.—

Rayleigh says that the blue color of the sky is due to the dispersion of the sun's light by the molecules of the air.

French chemists state that the latent heat of fusion of the fatty acids is higher than the latent heat of solidification.

Norwegian chemists have been studying the aurora borealis, and ascribe it to radioactive substances from the sun.

Iodine stains (on cloth, etc.) may be removed with hydrogen peroxide and ammonia water, three parts of the former to one of the latter being the best proportion.

Tartar on the teeth, M. Boville says, consists of carbophosphate of calcium. He says that dentifrices containing soap favor its deposit, while acid dentifrices prevent or remove it.

Acetanilide, antipyrin, and phenacetine are found to raise the freezing point of blood serum for a time after their administration.

Urethan is found to intensify the anesthetic influence of opium, beyond its own anesthetic action.

The Royal Commission on Tuberculosis has decided that much of the tuberculosis of children is due to milk containing tubercle bacilli, and that man is susceptible to the bovine bacillus.

An oil has been found in apple-peel to which the odor is due. The peel also contains a wax which protects the apple from wet.

A new process for obtaining radium makes low-grade ores available for obtaining it, and gives a yield in six weeks' treatment.

Thirty million ounces of silver are used annually in photography in the United States. But little of this is recovered.

Alcohol in chloroform does not prevent the decomposition of the chloroform by light, but renders the products of decomposition harmless. The only way of protecting chloroform is to exclude the actinic light.

Ferric salts in presence of light decompose citric and lactic acids, forming acetone and carbon dioxide. The latter effervesces and has led to suspicion of fermentation in elixirs containing these ingredients.

Strophanthin and saponin lose their properties when exposed to strong sunlight.

By treating the drinking-water in Cincinnati the typhoid rate has been reduced 83 per cent and the death-rate 70 per cent in three years.

Ozone is soluble in distilled water only to the extent of 1 part in 10,000 at 2° C., and 1 in 60,000 at 28° C. Some neutral salts increase the solubility.

Diamonds have recently been discovered in British Columbia; also platinum, but the latter is not in paying quantities.

Diphenylmethane has the characteristic odor of geranium, and is used as the basis of artificial geranium oil.

By treating pure water, free from gases, with ozone and an electric current, it is claimed that hydrogen peroxide having a strength of nearly 475 volumes can be produced.

It is said that the sap of the nipa palm, grown in the Philippine Islands, is the cheapest source of alcohol in the world.

Antipyrin combines with ferric chloride and with ferrous chloride, forming definite compounds which dissolve in alcohol or in water and yield a red solution.

About Enzymes.—

Pure rennin in a solution containing a little glycerin is rendered inactive by shaking, but on standing in the same container a part of its activity is restored. If no glycerin is present shaking does not appear to affect it. Commercial preparations of rennin, containing boric acid and sodium chloride, are not destroyed by shaking.

U. E. Porter finds that an artificial membrane renders most ferments (except taka-diastase) inactive by contact, and that this is not due to absorption, but to a change in the enzyme by contact. He suggests that this may be the real explanation of how the human body rids itself of the enzymes which it is constantly producing—*i.e.*, why the stomach itself is not digested.

Ointment Bases.—

Bartels & Van der Wielen have studied the water-absorbing power of ointment bases, and offer the following information: Petrolatum alone absorbs 20 per cent of its weight of water. With 2.5 per cent wax it absorbs 38 per cent; with 5 per cent, 42 per cent; and with 10 per cent, 35 per cent. With 2.5 per cent of spermaceti it absorbs 30 per cent; with 5 per cent, 40 per cent; and with 10 per cent, 35 per cent. With 2.5 per cent of wool-fat, it absorbs 80 to 140 per cent, depending upon the rate of addition; with 5 per cent, 100 to 240 per cent; and with 10 per cent, 140 to 288 per cent. The addition of phenols, particularly resorcin, they find to decrease greatly the water absorbability.

Where We Get Our Electricity.—

When yeast induces fermentation in sugar solutions, it is found that a considerable electrical current is induced which passes from the yeast to the sugar. In a 10-per-cent solution of glucose containing 3 Gm. of yeast in 100 Cc. a current of 0.3 volt was measured in seven minutes, which gradually decreased. Similar results were observed in the action of diastase on starch, and in the action of the coli bacillus on asparagin. All the experiments showed that electrical energy is liberated when microörganisms act upon organic bodies.

The Age of the Earth.—

J. Joly says that there are three ways of estimating the age of the earth. By estimating the amount of sodium chloride in the ocean and comparing with the amount carried annually by the rivers, the earth is calculated to be 80 to 150 million of years old. By estimating the amount of sediment from rock-decay, etc., the calculation is 148 million years. By calculation from radioactive changes, and the estimation of helium or lead in rocks, the earth is calculated to be 715 to 1640 million years old.

About Alcohol.—

R. Rosemann says that all but 2 per cent of alcohol, taken into the stomach, is utilized as a food, but that the food value of alcohol is very small because of its other effects. It dulls sensations, and thus tends to disarrange vital functions; it arrests hunger and leads to malnutrition; it numbs the nerves and brings danger from abnormal temperatures, fatigue, enervation, etc. He considers alcohol as an effective but very dangerous food, when improperly used.

Imitation Perfumes.—

The higher aldehydes are being used in perfumery to an increasing extent. Nonyl aldehyde is used in lilac and rose perfumes, octyl aldehyde in jasmine, narcissus, hyacinth, and jonquil, and duodecyl aldehyde is assuming an important place in violet perfumes. The latter is used in proportion of 5 to 10 per cent of the ionone employed, and is said to produce an infinitely superior bouquet.

Silk Mantles, Not Robes.—

Gas mantles made from artificial silk are found to be stronger and more durable than mantles made from cotton or ramie. Microphotographs show that the artificial silk fibers remain unbroken under action of the heat, while the others break. In practical vibration tests an artificial silk mantle was found to last seven weeks on a burner which destroyed a ramie mantle in six days.

Some Molecules!—

Professor Sang says that 1 Cc. of hydrogen is calculated to contain about 525 octillion of molecules. If ten thousand of these are allowed to escape every second, it would take seventeen quintillion (17,000,000,000,000,000,000) of years to empty, and Lord Kelvin has ascribed to the ether of space a weight of one-billionth gramme per cubic meter.

Own Up!—

The scarcity of Bulgarian oil of rose and the consequent high prices have induced the smuggling of oil of geranium as an adulterant into that country to such an extent that the authorities propose that its use as an adulterant be allowed and recognized. The 1910 crop was only half that of 1909, and the 1911 crop is smaller still.

Murder Will Out!—

Capillary analysis is a new form of operation by which certain poisons are detected in very minute quantities in the presence of large amounts of other matter. The instrument used is called the stalagmometer, and it is sensitive to 1/6500 grain of many metals. It is more rapid than the usual method of chemical analysis.

What Not to Drink!—

Dr. Whitney says that the toxic effects of alcoholic beverages is due in part to other substances than alcohol, and that various liquors reduced to the same per cent of alcohol vary markedly in their toxic action. Wines are the most toxic, malt beverages come next, and distilled liquors are least toxic.

Adrenalin as an Antidote.—

Adrenalin in 1-in-1000 solution is stated by Jona to be an efficient antidote for cyanide poisoning. About half an ounce should be given, followed by iron hydroxide. The adrenalin is stated to retard absorption of the poison, and can be used for this purpose in other forms of poisoning.

Can Be Done.—

That sulphuric acid can be manufactured by passing the sulphur dioxide gas into towers, similar to the Glover towers used for nitric acid, is proved by the successful operation of such a plant in Austria. They are more compact and appear to be more economical than the lead chambers.

Not So New.—

The distillation of turpentine from pine and spruce stumps was begun in Sweden 40 years ago, but has not proved very successful on account of the persistent burnt odor in the product.

AN ATTRACTIVE CANDY WINDOW.—This display of box candy, enlivened by the presence of several wax figures, appeared recently in the window of one of the Owl Drug Company stores in Seattle, Washington. On the left is represented a theatre box where a little girl is just helping herself to a chocolate. On the right is the scene of a home. The housewife standing beside the table is evidently opening a box of candy. Choice confections appear everywhere on the floor and on the walls. Price cards indicate the different packages for sale. The trim was arranged by J. A. Barlow and proved of unusual interest.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Bedbug Exterminators.

S. W. K. wants a formula for a bedbug exterminator that will not stain and does not contain mercuric chloride:

Naphthalin .....1 ounce av.
Gasoline .....16 fluidounces.

Mix and dissolve.

This is efficacious and is dangerous to use, on account of the inflammability of the gasoline. This mixture, it is said, may be used indiscriminately on bedding, furniture, textiles of all descriptions, wall-paper, etc. It may be improved by adding one ounce or so of paraffin wax, which acts by forming a coating over the eggs of the insects and preventing their hatching out.

A good bedbug killer is benzine, pure and simple, or mixed with a little oil of mirbane. It evaporates quickly and leaves no stain. The only trouble is the inflammability of its vapor.

The following is a popular preparation: To half a gallon of kerosene oil add a quart of spirit of turpentine and an ounce of oil of pennyroyal. This mixture is far less dangerous than benzine. The pennyroyal as well as the turpentine is not only poisonous but exceedingly distasteful to insects of all kinds. The kerosene while less quickly fatal to bugs than benzine is cheaper and safer, and when combined with the other ingredients becomes as efficient.

Where the wall-paper and woodwork of a room have become invaded, the usual remedy is burning sulphur. To be efficient the room must have every door, window, crevice, and crack closed. The floor should be wet in advance so as to moisten the air. A rubber tube should lead from the burning sulphur to a key-hole or auger-hole and through it, and by the aid of a pair of bellows air should be blown to facilitate the combustion of the sulphur.

Here are two good formulas that can be depended upon:

(1) Oil of pennyroyal.....1 drachm.
Turpentine .....8 ounces.
Kerosene oil, enough to make 1 gallon.

Put up in 8-ounce bottles as a bedbug exterminator.

(2) Oil of eucalyptus.....1 drachm.
Eucalyptus leaves .....1 ounce.
Benzine .....2 ounces.
Turpentine .....2 ounces.
Kerosene, enough to make.....16 ounces.

Mix the turpentine, benzine, and kerosene oil, and macerate the eucalyptus leaves in it for 24 hours; then strain and make up the measure to 1 pint, having first added the oil of eucalyptus.

Label for Horse Colic Remedy.

R. B. writes: "We are going to sell a horse colic remedy of the following formula:

Tincture of opium.....1 fluidounce.
Spirit of turpentine.....2 fluidounces.
Raw linseed oil..enough to make 16 fluidounces.

"How must our label read to conform to the Pure Food and Drugs Act?"

Attorney Charles M. Woodruff, to whom we have referred your query, answers as follows:

"The pure food and drug laws do not dictate how one must label a drug product except in the matter of stating the quantity of certain ingredients if they are contained in the formula. For example: Your formula contains tincture of opium, the quantity or proportion of which should be stated upon the label.

"The law forbids and prescribes suitable penalties for the adulteration and misbranding of drugs, and then defines the terms 'drugs,' 'adulteration,' and 'misbranding.' For example: Your remedy would be adulterated if you sold it under a name recognized in the U. S. P. or National Formulary and it differed from the standard of strength, quality, or purity as determined by the test laid down by these authorities, unless the actual strength was stated on the package; or, if the strength and purity are stated on the package and the drug fall below the professed standard of quality under which it was sold.

"It would be deemed misbranded if the label contained any statement regarding the article or any substance or ingredient which was false or misleading in any particular, or if it was falsely branded as to the State, Territory, or country in which it is manufactured or produced; and again if it is an imitation of or offered for sale under the name of another article; again, if the quantity or proportion of alcohol is not stated upon the package."

Mimeograph Inks.

I. H. S.—For use with any kind of a stencil, ink must necessarily be thick—more like a paste than like writing fluid—and it would apparently be best to use for the coloring agent some substance not soluble in the liquid employed to carry it, as it would then have less tendency to "creep" under the edges of the stencil and so spoil the impression. To grind a pigment fine enough for the purpose would be quite laborious, if done by hand, but colors may be obtained in the market ground in water, under the name of "distemper colors." An addition of gum arabic or dextrine mucilage would be necessary to hold the pigment to the paper on drying, and a very small quantity of glycerin would prevent the mixture from drying too readily. Aniline colors, ground with dextrine mucilage, can also probably be made to answer. The ink used for mimeograph copying process is of a pasty character, and almost any good stencil ink will answer the purpose. A few formulas follow:

(1) Shellac, 2 ounces; borax, 2 ounces; water, 25 ounces; gum arabic, 2 ounces; and of Venetian red, lampblack, Prussian blue, or any desired coloring substance, a sufficiency. Boil the shellac, borax, and some water until they are dissolved; add the gum arabic, and withdraw from the fire. When the solution has

become cold, complete to 25 ounces with water and more of the coloring substance to bring the ink to a suitable consistency.

(2) Printers' ink, made thin, is used on the mimeograph. The manufacture of inks of this type calls for a considerable amount of experience and skill. As much depends on the manipulation as upon the formula. The basis of printers' ink is a good quality of linseed oil, thoroughly boiled. It is boiled until it smokes, then ignited, allowed to burn about half an hour, then smothered, and again boiled until it can be pulled out into strings about half an inch long. Then a little rosin is added, and some soap, and the whole is boiled again, after which the pigment, usually lampblack, is thoroughly incorporated by machinery. The amount of rosin and soap to be incorporated varies with the conditions of use, and governs the consistency of the ink. The pigment must be very thoroughly triturated in to get good results.

(3) A simple substitute formula is the following: Copaiba, 9 ounces; lampblack, 3 ounces; indigo, 5 drachms; Prussian blue, 5 drachms; Indian red, 6 drachms; yellow soap, dried and powdered, 2 or 3 ounces. These must be very thoroughly triturated together. The consistency, which is an important feature of this kind of ink, may be controlled by the quantity of soap used.

Sticking Labels on Tin Containers; Painting Tins.

G. A. S. writes: "I am having lots of trouble in making labels stick to my drug cans. I have tried several different methods of sticking them without obtaining satisfactory results. Do you know or could you suggest some way they could be put on which would make them adhere? Can drug cans be painted so as to make them look well? If so, kindly inform me which would be the color most suitable and how to apply the paint."

Here are two schemes borrowed from a book entitled "350 Dollar Ideas for Druggists." H. V. Lott, of Canton, Illinois, says: "To make a label adhere to a tin box, proceed as follows: Rub two or three drops of tincture of myrrh on the surface of the container, let the box dry, and then apply the label in the usual way. I have used this method for five years, and no box has ever been returned to my store without the label still sticking to it."

S. L. Weyandt, Ph.G., Trafford City, Pa., advises: "To stick a label on the tin or aluminum caps of ointment boxes, or on tin of any kind, put a few drops of tincture of benzoin compound on the surface and apply a lighted match. When the burning ceases, apply a dry gummed label. It will stick for all time."

Replying to your second query, if the drug cans are clean, any paint can be applied. Use a fresh paint. Furthermore, it should be flat or free from oil. After painting the tins, a gloss may be obtained by applying a layer of varnish.

Lemon Cream.

C. H. H.—Supplementing what we had to say last month on the subject of lemon cream, we print the following borrowed from the *Montreal Pharmaceutical Journal:*

"As a woman grows older the sebaceous secretions diminish and her face needs oil or skin food. For this there is nothing better than a lemon cream made of almond oil, six ounces; white wax, ten drachms; spermaceti, ten drachms; lanolin, three ounces; oil of lemon, two drachms; elder-flower water, six ounces; witch-hazel, two ounces; tincture of benzoin, one drachm.

"Put the spermaceti, white wax, almond oil and lanolin all in a double boiler, and when they are warmed sufficiently take the mixture from the fire and beat in the elder-flower water, in which the lemon, witch-hazel, and the benzoin have been added a few drops at a time. This must be done carefully, or the cream will separate. It is healing, cleansing, and whitening."

Van Swieten's Solution.

M. B. L. writes: "Can you furnish me with the formula of Liquid Van Sevitan? It is prescribed by one of the local physicians, who claims it to be a pharmacopœial preparation. I have carefully looked over the U. S. P., N. F., U. S. Dispensatory, and all other available literature that I was able to procure on pharmacy and pharmaceutical preparations and find no mention of it."

We do not find Liquid Van Sevitan. If you mean Van Swieten's solution, in Remington's Practice of Pharmacy appears the following formula:

Corrosive chloride of mercury.....15 grains.
Alcohol, 80 per cent.....3½ fluidounces.
Distilled water, sufficient to make 32 fluidounces.

A tablespoonful contains nearly ¼ grain of corrosive chloride of mercury.

The New Standard Formulary gives the following formula:

Mercuric chloride.....7½ grains.
Ammonium chloride .....15 grains.
Alcohol .....2 fluidrachms.
Orange flower water.....8 fluidounces.
Distilled water, to make.....16 fluidounces.

Dissolve the salts in 1½ fluidounces of water, and add the other ingredients. This solution should be kept in dark or amber-colored bottles.

Several of the European pharmacopœias give formulas for Van Swieten's solution, but there is apparently some difference between them. Mercuric chloride, however, is the chief ingredient in each one.

Transferring Engravings to Paper.

T. H. L. wants a formula of a good transferring fluid, something that can be used for either fabrics or paper.

The liquid used for this purpose may be made by dissolving 1½ drachms of common yellow soap in 1 pint of hot water, adding, when nearly cool, ¾ fluidounce of spirit of turpentine and shaking thoroughly together. Apply the fluid liberally to the surface of the engraving or other printed matter with a soft brush or sponge, being careful not to smear the ink, which soon becomes softened, and allow it to soak for a few minutes. Then damp well the plain paper on which the transfer is to be made, place on it the engraving, and subject the whole to a moderate pressure for about a minute. On separating them a reversed transfer will be found on the paper. The transfer will not be equal in intensity to the original, as only a part of the printer's ink is removed. If the ink be very old, a longer soaking and more pressure may be necessary.

We do not know whether this process can be used on fabrics as well as paper, but you might try it.

Several Queries.

E. P. submits the following request: "Please give me the full derivation of the words pyroxylin, colloxylin, xyloidin, and collodium. I also want an easy method for the assay of pyroxylin if there is one, and

any history beyond that given in the National Dispensatory."

Pyroxylin is derived from the Greek, πῦρ, fire, and ξύλον, wood; xyloidin from ξύλον, wood, and εἶδος, form; collodium from κολλωδης, glue-like. See Gould's Dictionary of Medicine.

We can find no method of assaying pyroxylin. You might make a nitrogen determination by the Kjeldahl method, but that is not exactly easy. Is it possible you have in mind the determination of pyroxylin content in an ethereal solution? In that event you could evaporate off the solvent and weigh the residue.

We have consulted several chemical works for the history of pyroxylin, but find they add little to what is published in the National Dispensatory.

An Interesting Incompatibility.

E. D. D. submits a very unusual query. It seems he received the following prescription:

Ammoniated mercury	5 grains.
Salicylic acid	5 grains.
Ointment of rose water	1 ounce.

Mix.

He filled the prescription and dispensed the salve in a glass jar with an *aluminum* lid. The customer returned the jar to the physician, claiming that it was hot and burned his fingers.

Prof. W. L. Scoville, to whom we have referred this query, offers the following explanation: The trouble is due to the action of the aluminum on the mercury salt. The latter is reduced and an amalgam forms, the mercury uniting with the aluminum. Then this appears to be acted upon by the water in the cream and aluminum hydroxide formed in presence of air.

The aluminum cover should be protected thoroughly by parchment paper.

Quinine Precipitated.

T. M. W. submits the following physician's prescription for a hair tonic for criticism:

Mercuric chloride	7 grains.
Resorcin	2 drachms.
Quinine	2 drachms.
Oil of tar	1½ fluidrachms.
Tincture of cantharides	1 fluidrachm.
Tincture of green soap	½ fluidrachm.
Alcohol, enough to make	8 fluidounces.

He wants to know, too, whether it should be labeled poison.

A precipitate of quinine is thrown down by the mercuric chloride. Since this hair tonic is a prescription written by a physician, it need not be labeled poison unless the doctor so directs.

Clarifying Compound Elixir of Taraxacum.

O. A. R. has been having trouble with Elixir of Taraxacum Compound N. F. He says: "I get a precipitate, a cloudy, muddy mixture, every time I must send out a prescription containing it. I have tried filtering the elixir through paper, pumice, magnesia, precipitated calcium carbonate, and purified talc. After about 2 ounces filter through any one of these mediums, the filter becomes clogged. Can you tell me what to do to get a clear filtrate?"

No. We can't see any help for you. This elixir is made from fluidextracts of the kind that are inclined to precipitate badly. We have never yet seen it made and remain clear. The best suggestion we can offer is to decant or filter the elixir as it is needed. A filter paper should be sufficient without any other clarifying agent.

An Incompatible Prescription.

W. B. asks why a solution of potassium citrate in water effervesces when mixed with spirit of nitrous ether?

Prof. Wilbur L. Scoville, to whom we have referred this query, offers the following explanation: Aqueous solutions of potassium citrate, unless weak, will not mix with alcoholic liquids. In a combination with spirit of nitrous ether, the potassium citrate solution liberates the nitrous ether from its alcoholic solution, and the ether, boiling at 17° C. (62° F.), passes off just enough to appear as an effervescence. If the liquids be cooled well below 17° C. before mixing, no effervescence will occur, but the ether will be found floating on top of the liquids in a short time. The alcohol will also have separated from the mixture.

A Presentable Mixture.

A. J. D. requests us to criticize the following prescription:

Potassium iodide	2 drachms.
Tincture of gelsemium	2 fluidrachms.
Simple elixir, enough to make	4 fluidounces.

Mix and make solution.

In aqueous solution the potassium iodide would precipitate alkaloids from tincture of gelsemium, but when 20 per cent or more of alcohol is present, as in this case, the alcohol prevents precipitation. Save for a slight cloudiness, made by diluting the tincture, the prescription will be very presentable when compounded.

Dry Shampoo.

G. B. C. wants a formula for dry shampoo, one containing powdered orris root. The following mixture is suggested:

Powdered orris	6 ounces.
Fullers' earth	7 ounces.
Arrowroot starch	½ ounce.
Oil of lavender	1 drachm.
Alcohol	1 ounce.

The oil of lavender is dissolved in the spirit and sprayed on to the mixed powders.

Elixir of Cinchona.

F. P. H. wants a formula for an essence of calisaya alkaloids.

A preparation quite generally used is the following:

Quinine sulphate	30 grains.
Cinchonidine sulphate	15 grains.
Boiling water	8 ounces.

Dissolve and add:

Elixir aromatic U. S. P., to make	1 gallon.
Tincture of cudbear compound, q. s. to color deep red.	

Will some pyrotechnical expert answer the following query for one of our readers: "What chemicals when allowed to soak through cotton or a similar substance from opposite sides, ignite upon coming together?"

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THE MONTH'S HISTORY

N. A. R. D. AMENDMENT TO THE SHERMAN ACT.

It has been known for some months that Frank H. Freericks, acting as the legal adviser of the N. A. R. D. in the illness of Judge Errant, was drafting an amendment to the Sherman act which would specifically permit retail dealers to act coöperatively in the protection of living prices. After a good deal of study and effort, together with assistance from the National Executive Committee, Mr. Freericks finally perfected his amendment and last month laid it before the Senate Committee on Interstate Commerce at a hearing specially secured by W. S. Richardson.

Mr. Freericks talked for some time before the committee, and he handled himself and the proposition ably. He declared that the Sherman act, while aiming to preserve free competition, really destroyed free competition for the reason that it permitted large dealers to so cut prices and indulge in other tactics as to drive the small dealers to the wall and thus bring about a partial monopoly. The small dealers were prevented from protecting themselves by means of any combination of effort, for this was held to be restraint of trade within the terms of the act.

His proposition was to supplement the law with a number of sections giving labor organizations, producers, growers and retail merchants the right to "direct the concerted action of their members to prevent ruinous underselling tending toward monopoly and centralization of trade." To this end, so far as retail dealers were concerned, associations would be permissible and "members of such associations might agree among themselves and with individual manufacturers to secure the selling prices established by such individual manufacturers for their respective products." And in order that this right would not be abused, the amendment provides for adequate supervision either from a special governmental commission or from some bureau in the Department of Commerce and Labor.

Mr. Freerick's argument was that, unless retailers were protected in some such manner, they became the prey and victim of their larger and richer competitors; that equality of opportunity was therefore destroyed; and that in the long run it was "better for the country as a whole to preserve a condition under which the smaller man can continue."

* * *

NEW N. A. R. D. CONTRACT PLAN.

During the present session of Congress, however, all sorts of amendments to the Sherman act have been proposed, and the situation is in such confusion that nothing is likely to be done this year. The whole question indeed is more or less in chaos, but this is no reason why the drug trade should be in despair for the ultimate outcome. The act will in all probability

be amended in some form within the next year or two, and indeed the Sherman law was the one important political issue until Mr. Roosevelt threw himself into the breach a few months ago and brought constitutional questions into the foreground. Competition and its regulation, however, will be a paramount topic for many years to come, and the drug trade will be wise if it keeps itself in touch with the problem and does everything possible for its own protection.

In the meantime Mr. Freericks has also drawn up a new form of contract plan which we understand is a combination of the Miles and Boehm methods. We expressed the opinion editorially last December that it was exceedingly doubtful whether any sort of price protection would escape the prohibition of the present Sherman act. Evidently the National Executive Committee of the N. A. R. D. agreed with this view, for Mr. Freericks was instructed to draw up an amendment to the Sherman act prior to giving consideration to a new contract plan. Inasmuch, however, as there will be inevitable delay in amending the law, the N. A. R. D. has decided to go ahead and see what it can do in the meantime with the problem of price protection.

It is possible that even now some form of a contract plan might be drawn up which would not be held in contravention to the law. The effort is worth trying anyway. Mr. Freericks's plan is now in the hands of the Executive Committee for discussion, and it will be printed soon in *N. A. R. D. Notes*—possibly before this issue of the BULLETIN reaches its readers. As we have already suggested, however, we understand that the plan combines the agency assignment idea of the Miles method with the coupon feature of the Boehm scheme. The coupon idea makes for practical simplicity, and does away with a good deal of bookkeeping and inconvenience of one kind and another.

* * *

CONGRESSIONAL MATTERS.

Besides the Richardson bill, there are six or eight other measures pending in Congress to amend the food and drugs act or else affecting the drug trade in some other way. A hearing was to be held on all of these measures before the Interstate Commerce Committee of the House on April 23, but at the time of going to press we had not heard what the definite results were, if any. It is doubtless too early anyway to say what the committee may decide to do. In the meantime the Richardson bill continues to be discussed from every angle in the drug press, the medical press, and even in lay journals. Everybody is agreed that the bill in its present form is a monstrosity, and that some modification is essential before it can be considered seriously. Just what this modification may be, and whether the various drug interests will come to an agreement concerning it, remain to be seen. So far as the tentative narcotic ruling of the government is concerned, hearings were held some weeks ago before the Board of Drug and Food Inspection of the Department of Agriculture, but at this writing no decision has been promulgated from the department.

* * *

THE ARTIFICIAL CULTIVATION OF DRUGS.

Dr. Rodney H. True, of the Bureau of Plant Industry of the Department of Agriculture, recently delivered an address at the annual meeting of the College of Pharmacy of the City of New York on the cultivation of medicinal plants. Dr. True made it plain that agriculture is absorbing more and more of the land formerly bearing native drugs. Goldenseal was cited as a striking example. Dr. True said that twenty-five years ago this drug was plentiful and the price low. Ginseng he mentioned as another example of a plant which has grown costly by reason of its scarcity. Bloodroot, serpentaria and pinkroot have also become far less abundant.

Facts like these have stimulated study of the problem of growing these drugs by artificial cultivation. Dr. True went on to explain the various precautions that must be observed in cultivating drugs. Cascara seeds must be planted before they become too dry and molding must be prevented. Lobelia will come up in a year or a fraction of that time, depending on the season in which it is planted.

When it comes to the cultivation of foreign drugs, the work is far more complicated than the growing of domestic plants. They must be transplanted in an agreeable environment. Unless they bear seed, the roots must be intact. "Imported citronella and geranium," said Dr. True, "have failed to grow in this country owing to the fact that they were injured by faulty packing." Washington and Vermont,

according to the government reports, have been found very suitable for the cultivation of poppy. But labor and freight rates are too high to make the scheme practicable. Licorice, it is said, will flourish in Southern California.

When we consider that something like eighteen million dollars worth of vegetable drugs are imported annually into the United States, we watch with considerable interest the experiments of the Bureau of Plant Industry to preserve our domestic herbs and to cultivate medicinal plants not now indigenous in this country.

* * *

CO-OPERATIVE DRUGGISTS' ADVERTISING.

Coöperative local advertising is being done by druggists in at least four cities—Cincinnati, Cleveland, Chicago, and Philadelphia. The Cincinnati plan, under which the druggists call themselves the Economy Drug Stores, was described in the BULLETIN some months ago. The Cleveland plan is very similar. There ninety-one druggists are in the scheme, and they call themselves the Mutual Drug Stores. The ads. appear every Wednesday and every Sunday in at least one of the local papers, and the druggists all profit alike from them. An expert ad. writer has been secured to prepare the announcements, and usually, in addition to regular line goods, a special-day offer is made on something as a bait to the purchasing public.

In Chicago and Philadelphia the plan is somewhat different. In Chicago a double page is taken in the *Chicago American* once a week. Across the top and down the center appears text matter giving reasons why the public should patronize the small druggists scattered over the city, whose names presumably appear in the advertisement. The rest of the space is devoted to display ads. inserted by national manufacturers and others of whom the druggists approve, and whose goods they handle. The manufacturers pay enough for the space so that the druggists are put to no expense for the publicity they get. The Philadelphia plan, we understand, is somewhat similar, although we believe only one page is used instead of two.

Another coöperative scheme being worked by the Chicago Retail Druggists' Association has to do with druggists' windows. A company is being formed among the members of the association for the purpose of establishing a definite price for window display space, and then for renting the space to manufacturers who may want to use it. As first attempted, this plan didn't work out very well, but the problem is now being approached from another direction. Each druggist who goes into the scheme is expected to buy a share of stock worth $10.00, but it is represented to him that his income will run into a handsome figure annually.

* * *

CANDIDATES FOR WILEY'S PLACE.

The selection of a successor to Dr. Wiley continues to arouse a great deal of comment. The number of candidates is already quite large, but no one seems to know which particular one has the inside track. Drs. Doolittle and Mitchell, both of them already in the Bureau of Chemistry, continue to be mentioned for the place, as does also Dr. H. E. Barnard, Food and Drug Commissioner of Indiana.

The candidacy of Dr. James H. Beal, first suggested by the College of Pharmacy of Columbia University, in New York, has been warmly advocated by numerous friends in the trade, and a considerable campaign in his favor has been developed. The *Midland Druggist* observes that "a more wide-spread movement could not be imagined." We learn from *N. A. R. D. Notes,* too, that Prof. F. J. Wulling has been suggested to the president by some of the pharmacists of Minnesota under the prompting of Charles H. Huhn, chairman of the Executive Committee of the N. A. R. D.

In the meantime President Taft is understood to be waiting until he gets replies to all of the letters of inquiry sent out to scientific men and to college and university presidents throughout the country. He evidently hopes that the consensus of expert opinion will automatically point to some one man for the place, thus insuring the appointment of a popular and effective man.

* * *

PROPOSED MICHIGAN MERGER.

Very wisely, it seems to us, the two State associations in Michigan are planning to consolidate. The Michigan State Pharmaceutical Association has been in existence for twenty-five or thirty years, but the Michigan Retail Druggists' Association was created only three or four years ago. The membership of the latter body was largely confined to the western portion of the State, and the purpose of the organization was chiefly to secure certain legis-

lation. There is no longer any need for a separate society, however, and we are glad to see that a joint meeting will be held in Muskegon during August, and that consolidation will undoubtedly be effected at that time. A referendum vote has been taken among the two memberships, and will doubtless be almost unanimously in favor of the proposed merger. What the name of the greater association will be is one of the details which will doubtless not be settled until the Muskegon meeting. The date is August 13 and 14.

* * *

ADRENALIN PATENTS UPHELD.

The United States Circuit Court of Appeals has affirmed the decision of the lower court upholding the validity of the product patents on Adrenalin and Adrenalin Solution. From this decision there can be no appeal, and the case is therefore settled permanently. The defendants were the H. K. Mulford Company, whose products, Adrin and Adrin Solution, were declared to be clear infringements of the Takamine patents. The decision is so positive in its language that all other imitations of Adrenalin are undoubted infringements also. Some of the manufacturers of these products withdrew them from the market a year ago when the first decision was rendered, and the others will now probably be proceeded against. The Court of Appeals even intimated that a synthetic product would be held to violate the patents, although it refused to discuss this phase of the question for the reason that it was not in issue in the Mulford suit. Adrenalin and Adrenalin Solution are manufactured by Parke, Davis & Co., who pay royalties to Dr. Takamine, the inventor.

* * *

PREREQUISITE IN NEW JERSEY.

For several years there has been a movement in New Jersey looking toward the enactment of a graduation prerequisite law. Last summer, at the annual meeting of the State Association, the subject was threshed out with a good deal of heat, and the final result was the adoption of a resolution by a small majority favoring the enactment of such a law. A bill was subsequently drawn up and introduced this last winter into the State legislature, Some factional differences developed, we understand, particularly between two rival institutions in the State, and so unfavorable an impression was made upon the Legislative Committee before which hearings were held that the whole proposition was tabled. It will doubtless come up again at this year's meeting of the association, and in all probability another bill will be introduced in the legislature, for the majority of sentiment in the State seems to favor the prerequisite proposition.

* * *

DR. TAKAMINE HONORED.

Dr. Jokichi Takamine has recently been granted a distinguished honor by the Imperial Academy of Japan. A monetary prize and award of high merit have been given him for the discovery of Adrenalin, and the presentation is to be made in Tokio on the 12th of the present month. Although the Imperial Academy has been in existence for about seven years, Dr. Takamine is only the second man to be so honored. The first prize-winner was Dr. Kamara, the famous Japanese astronomer. The Imperial Academy was organized by the Japanese government, and the membership is limited to 60, one representative man being selected by the Emperor from each department of scientific endeavor. The Academy corresponds to the Académie Francaise or the Royal Society of Great Britain, and its awards are considered evidence of very great distinction.

* * *

THE DETROIT DRUG CLUB.

Some months ago we spoke about the drug clubs which were being formed in St. Paul and Minneapolis. A similar organization has now been effected in this city. A campaign for increased membership is on, and the purpose is to have club rooms if the receipts will warrant them. In the meantime the purpose of the club, following the plan in St. Paul and Minneapolis, will be largely if not entirely social. The officers of the organization are Henry C. Reinhold, president, Robert W. Rennie, vice-president, Oscar W. Gorenflo, secretary, and P. E. Biddecombe, treasurer.

* * *

The druggists of Greater New York have decided to accept the sliding scale of telephone commissions agreed upon between the telephone company and the special telephone committee of the Pharmaceutical Conference.

EDITORIAL

THE VARIATION CLAUSE IN THE FOOD AND DRUG LAWS.

Every once in a while we hear a protest against the so-called variation clause in the Federal food and drugs act—a clause which is likewise embodied in most of the State laws. This clause may be found in italics in the following quotation from Section 7 of the Federal act:

That for the purposes of this act an article shall be deemed adulterated: In the case of drugs, first, if when a drug is sold under or by a name recognized in the United States Pharmacopœia or National Formulary, it differs from the standard of strength, quality, or purity, as determined by the test laid down in the United States Pharmacopœia or National Formulary official at the time of investigation: *Provided, That no drug defined in the United States Pharmacopœia or National Formulary shall be deemed adulterated under this provision if the standard of strength, quality, or purity be plainly stated upon the bottle, box, or other container thereof, although the standard may differ from that determined by the test laid down in the United States Pharmacopœia or National Formulary.*

Recently, for instance, a leading article was published in *N. A. R. D. Notes* in which, among other statements, the following opinion was expressed:

To every retail pharmacist who has given this section serious thought, it is a mystery as to who is responsible for the words following the word "Provided" in the section. To them it seems a travesty on justice; and to every intelligent person the section means that "no matter what the composition of a preparation may be, if the label gives it an official name and its strength is stated, it is not adulterated."

All such criticisms as this betray an utter inability to grasp the fundamental purpose of food and drug laws. Their object is not to prevent the sale of this or that food or drug, but to compel its sale openly, fairly, without false pretense, and with the positive truth about it stated honestly on the label. If a man wants to buy oleomargarine instead of butter, he should have the right of all free citizens to do it, but he mustn't be deceived and given oleomargarine when he asks for butter and pays butter prices. That's all there is to it. Give the man what he wants—but don't deceive him. Tell him the facts—and then it's up to him.

There happens to be a stomach specialist in Detroit who prescribes large quantities of a weak tincture of nux vomica only 25 per cent of the official strength. He does this because he wants his patients to take teaspoonful doses, which are easily measured by them. Now does anybody mean to say that it should be illegal to furnish this physician with tincture of nux vomica of this character so long as the strength is plainly printed on the label? He isn't deceived, is he? He wants this particular product and he insists on having it.

There is only one "Pill Opium" in the U. S. P. It contains one grain of opium. Suppose physicians want pills containing one-half grain of the drug? Should the law declare that they cannot buy such pills, even though the strength is clearly printed on the bottle?

But so far as drugs are concerned, these considerations are after all beside the question. The main reason why the variation clause should always stand is this: It will permit of pharmaceutical progress. The U. S. P. is brought out only once in ten years. Must no improvements be registered in medicinal products until ten years from now, say, when a new book happens to be published? Everybody knows that the scientific investigators in the large manufacturing establishments have chiefly been the men who have brought about a steady advance in standards, and that the Pharmacopœia has been three or five or ten years behind them in making such changes official. Shall we deny ourselves as a calling the benefit of this forward movement, and kill or stultify all progress? Must we hold improvements back until the clock rings a few years hence?

This is exactly what will happen if we declare by law that no changes may be made in U. S. P. or N. F. preparations. Why resort to such an obstinate measure? Every protection is afforded if, making the necessary change in a given preparation, the facts are clearly stated on the label as the variation clause provides.

Furthermore, there are good lawyers who maintain that the variation clause is the only thing which saves Section 7 of the food and drugs act. Otherwise there is a strong probability that when put to the test of court construction the section would be held unconstitutional. The right of the individual to buy what he wants, and the right of the manufacturer and dealer to make and sell honest

goods with honest labels, cannot be infringed upon beyond a certain more or less clear and definite point. This is a free country.

SOME HYNSONIAN VIEWS.

Henry P. Hynson, our irrepressible friend from Baltimore, has been telling the physicians of his own city what ought to be done in the future to put the relations of pharmacist and physician on a firm and permanent footing. He doesn't believe much in the present U. S. P. and N. F. propaganda movement. "There is a pitiable lack of knowledge and understanding evidenced in most of the propagandic exploitation," and anyway he thinks it unfortunate "to teach that all that is in the Pharmacopœia or National Formulary is good, and all that is without is bad." This is to "put lions in the pathway of progress."

What, then, are Mr. Hynson's ideas about what shall be done to bring about "a more beautiful and happy to-morrow?" Well, in the first place, we must rationalize the standard books used alike by the two professions, and clear away a lot of rubbish. He would leave the Pharmacopœia, however, as it is—a book of standards for all medicines used by the physicians of America. Mr. Hynson is not an advocate of a narrow Pharmacopœia.

1. What some of the medical extremists want, however, when they talk about a narrow Pharmacopœia, is what Mr. Hynson would have in the form of "a national compilation of standard therapeutic agents." To this seventh heaven he would elect only those medicaments which "bear the stamp of scientific approval and the impress of some competent and general authority." He would let this authority be the A. M. A., and let that association publish the book.

2. In addition to this, we must have something like the N. F. for the publication of formulas acceptable alike to higher medicine and higher pharmacy. The present book, however, contains in Mr. Hynson's judgment a lot of mixtures which have no good reason for existence, and he would throw them overboard and have a purified and scourged National Formulary. This, unlike the book of standard therapeutic agents, would be published by the American Pharmaceutical Association.

3. In casting these devils out of their present heaven, however, they should be caught and collected in a new book of miscellaneous odds and ends of formulas, for many foolish people still insist on using such things. For this purpose Mr. Hynson would have an "unendorsed collection"—a "final resting place" for things removed from the accredited authorities. Such a book of "unofficial formulas" the A. Ph. A. now has in contemplation.

To Mr. Hynson's way of thinking these several things would purify the atmosphere. The Pharmacopœia need then no longer be used as the basis of any propaganda movement, for there would be a book of accepted therapeutic agents, compiled by the physicians themselves, which would really stand the test of therapeutic worth. The same thing would be true of the purged National Formulary, which would no longer contain things of questionable merit. The A. M. A. book of standard agents, and the A. Ph. A. book of standard formulas, could be used as a platform on which both professions could work together harmoniously. The Pharmacopœia would be relegated to its proper position as a book of legal standards of identity and strength, while all of the doubtful mixtures now cursing the N. F. would be cast apart into a book which nobody need put any faith in but which everybody would use.

So there you are—a programme of reform worked out by one of the leading ethical pharmacists of the country.

THIS ISSUE OF THE BULLETIN.

Our friends have been telling us in gratifying number that we have been turning out a great journal this spring. Elsewhere we are printing a very few of these generous letters. Such praise has spurred us on to renewed efforts, and we are presenting some special features in this issue of the BULLETIN which we hope will prove interesting and attractive:

1. Our Illustrated Section of six pages is unusually good this month. We are devoting two pages to pictures of the president of the N. A. R. D., his store, and his residence. Then there is a page of nine portraits showing presidents of some of the State pharmaceutical associations, and another page of well-known teachers in our schools and colleges. The cartoon of Prof. John Uri Lloyd

will, we hope, strike everybody as being excellent, while the full-page picture of B. S. Cooban, taken behind his own counter for us specially, will prove of particular interest to BULLETIN readers because of Mr. Cooban's former connection with this journal.

2. We have recently brought to a close our prize contest for best papers on "The Sale and Fitting of Trusses." The three prize-winning contributions are printed in this issue, and they will certainly prove a novelty. Very little has appeared in the drug journals on this subject, and we fear that most druggists have neglected their truss business, but our three contributors tell how they have made a substantial success of the line.

3. The second article in the series of technical papers on sundries is devoted to toothbrushes. Mr. J. Addison Bowne, an importer of large experience, describes how the brushes are made, what they are made of, and gives many pointers of usefulness to the druggist who desires to know all he can about the goods which it is his business to sell over the counter.

4. Our series of prize-winning papers on "My Best Paying Side-line" is also continued. Mr. Holzhauer tells how he has built up a profitable business on razors and razor supplies, and he sends in a photograph showing how he features these goods in his window.

In the foregoing paragraphs we have merely touched on some of the special features of the present issue of the BULLETIN. Next month we shall have a lot of especially good things. First in importance, perhaps, we shall print the three hair-tonic formulas which have been awarded prizes in our recent contest, and shall probably give space also to a couple of short papers in which druggists tell how they have pushed these preparations. Then we shall continue the series of articles on druggists' sundries, the series on "Best Paying Side-lines," the business autobiography of Mr. Farrington, and other things which have proved of interest and helpfulness to our readers. Nor should we neglect to mention that we shall have in the next BULLETIN six or seven pages of pictures which we hope will prove more attractive than ever.

The fact of it is, we are not satisfied merely to have a paid circulation for our journal which is three or four thousand in excess of that enjoyed by any other drug paper, but we want to forge ahead farther yet. Ours is a six-cylinder, high-power proposition—and we want to keep the dust all behind us!

WHAT THEY THOUGHT OF THE LAST BULLETIN.

We are always being made happy by a constant stream of letters from our readers telling us how much they appreciate this journal. After the April number had been published, however, congratulations were more numerous than ever. Witness a few of them:

I have just read the April BULLETIN, and I must say that the journal gets better all the time. Have been a subscriber four years, and the last issue is the best I have seen. The pictures are appreciated by all, and the more the better. There has never been a dull copy since I began taking the journal. One kick I have coming is that I am sorry to see the department of "General Essays" drop out. JEWELL A. STILL.

Arkansas City, Ark.

Your April issue of the BULLETIN is without doubt the best you have ever published. The journal is always good, but this one excels them all. It contains many, many of the most helpful suggestions for live druggists, and is one which would be valuable if kept for reference. FINIS J. ROGERS.

Chattanooga, Tenn.

Permit me to congratulate you upon the appearance of your April issue, both editorially and mechanically. With best wishes for the future of the BULLETIN OF PHARMACY, which we assure you is always carefully read by us, we remain, T. P. COOK,

Mgr. New York Quinine and Chemical Works.

New York City.

We tried pretty hard to make the last issue of the BULLETIN a winner, and we are glad to know that our efforts were appreciated.

MYLERT VERSUS ALERT.

The time will come when no pharmacist will think of trying to do business without belonging to his local organization any more than he now tries to get along without a bank account and credit with manufacturers and jobbers.—*Meyer Bros. Druggist.*

This is a fine article, Bro. Whelpley, except the "credit with manufacturers and jobbers." Our doctrine is for retailers to *pay cash and take the discount,* or strive valiantly for the time when they can do so if they can't now.—*C. R. D. A. News.*

Chas. Mylert was not Alert this time. It is exactly by "paying cash and taking the discount" that a merchant establishes credit with manufacturers and jobbers.

THE HALL OF FAME

PROFESSOR BRADLEY GOES TO BOSTON.

Theodore J. Bradley, B.S., Ph.G., has been elected to succeed the late J. W. Baird as executive officer and Professor of Analytical and Organic Chemistry in the Massachusetts

THEODORE J. BRADLEY.

College of Pharmacy. The choice is an excellent one. Professor Bradley is not particularly well known in pharmaceutical circles, for the reason that during the last few years he has specialized more in chemistry, but he has an equipment of native ability and wide training which fits him admirably for the place.

Some of the things that may be said of him are that he spent five years' apprenticeship in two of the best drug stores in Albany, N. Y.; was graduated from the Albany College of Pharmacy in 1895 at the head of his class; completed a four years' course in engineering and science in the Rensselaer Polytechnic Institute, Troy, in 1904; has for seventeen years been at various times instructor, lecturer and adjunct professor of chemistry and pharmacy in Albany College of Pharmacy, during the last twelve of which he has been the secretary of the faculty and the executive and financial officer; has been an instructor and lecturer in chemistry at the Albany Medical College; chemist in the laboratories of the New York State Department of Health and the New York State Department of Agriculture, and an expert examiner in pharmacy for the New York State Civil Service Commission. In addition to all this Professor Bradley has for twelve years been teacher of science and mathematics in the Albany Academy, a famous boys' military and preparatory school, and during the last eight years has been head of the department in these branches.

So far as his native qualities are concerned, he is brainy, determined, a hard worker, full of steam and energy, and a man pretty sure to push along in anything that he undertakes. The Massachusetts College, with its rich endowment, has an opportunity to work out a future for itself of great value to the calling, and Professor Bradley is an excellent acquisition toward the accomplishment of this end.

IS IT TO BE "CONGRESSMAN STODDART?"

Thomas Stoddart, drug leader in New York State, is a candidate for the Republican congressional nomination in the new Buffalo district. No one who knows Mr. Stoddart doubts that in point of business experience, contact with legislative matters, and sobriety of judgment he would make an excellent congressman. For years he has been one of the chief men

THOMAS STODDART.

among the druggists of New York State. He served twice as president of the New York State Pharmaceutical Association some years ago, and after a long hiatus he was called back into the same service a year or two since. No

bill of importance affecting pharmacists has been introduced in the New York legislature but that Mr. Stoddart has had much to do with its original construction and subsequently with its legislative history in Albany. Always prominent in the civic affairs of Buffalo, he has once or more been a member of the City Council, and during at least one session he was the presiding officer of that body. On more than one occasion he has been prominently mentioned for the mayoralty, and it does not beggar the truth to say that he has played a most conspicuous rôle in the political and commercial life of the city.

TOASTING PROFESSOR REMINGTON.

Prof. Joseph P. Remington, maker of pharmacopœias, was given a testimonial dinner the other day by the Philadelphia Drug Club. It was in honor of his sixty-fifth birthday on the one hand, and, on the other, of his fortieth anniversary as a member of the faculty of the Philadelphia College of Pharmacy. The tribute was well deserved. No one in the country is more worthy of the praise and blessings of his

Jos. P. Remington.

fellow workers. Professor Remington is not only the dean of the Philadelphia College, but he comes pretty near being the dean of American pharmacy as well. The dinner was largely attended, and there were many telegrams and letters read from the Professor's numerous friends throughout the country. These messages have since then been brought together in the form of a neat souvenir, and they give gratifying evidence of the esteem in which the man is held. As Dr. Beal said, "long may he flourish!"

A DRUGGIST FOR DAIRY AND FOOD COMMISSIONER.

Down in Ohio—that grand old State which has produced so many presidents and would-be presidents—the Dairy and Food Commissioner

Charles S. Ashbrook.

is elected by the people instead of appointed by the governor. The nomination and election of State officers is in full swing this year, and it affords us much pleasure to see that Charles S. Ashbrook has been strongly urged to become a candidate for the Republican nomination for Dairy and Food Commissioner. It will be recalled that Mr. Ashbrook served two terms recently as president of the Ohio Pharmaceutical Association, and it is considerable praise to say of him that he was the only man ever elected to this position twice. So creditable, however, was his energetic campaign looking toward the organization of county associations, and so efficient was his administration generally, that the members insisted on putting him back into office in order that he could carry forward some of his reforms.

He has a prosperous store in Mansfield, and of that town he is a leading citizen. For two years he was president of the Mansfield Mercantile Association, and he will make an excellent Dairy and Food Commissioner if the people of the State choose to nominate and elect him.

Herman C. Shuptrine, Savannah, Ga., President of the National Association of Retail Druggists.

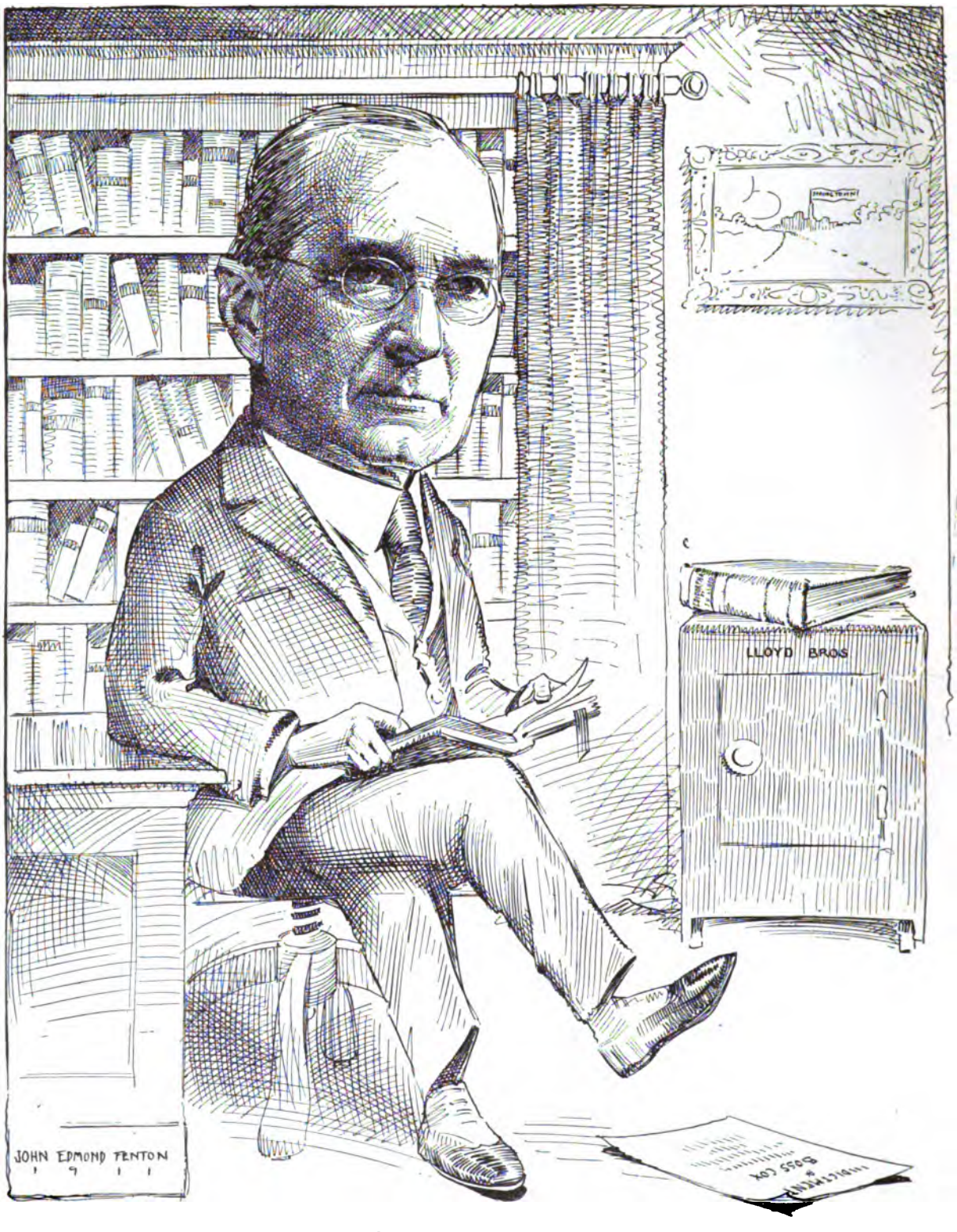
Mr. Shuptrine's house.

Mr. Shuptrine's store in Savannah.

Herman C. Shuptrine, Savannah, Ga., President of the National Association of Retail Druggists.

Mr. Shuptrine's house.

Mr. Shuptrine's store in Savannah.



John Uri Lloyd—The Man of Many Talents.

Pharmacist, Chemist, Investigator, Teacher, Historian, Thinker, Library-builder, Civic-reformer, and Writer—author of the "Stringtown" tales, "Etidorhpa," and novels, scientific papers, dispensatories, and historical bulletins without number.

[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

2. B. S. Cooban, Chicago, Illinois.

C. Lewis Diehl, Professor of Theory and Practice of Pharmacy in the Louisville College of Pharmacy.

Alfred B. Huested, Professor of Materia Medica in the Albany College of Pharmacy.

Charles H. LaWall, Associate Professor of Pharmacy in the Philadelphia College of Pharmacy.

George B. Kauffman, Professor of Pharmacy in, and Dean of, the College of Pharmacy of Ohio State University, Columbus.

E. H. LaPierre, Professor of Pharmacy in the Massachusetts College of Pharmacy, Boston.

Charles F. Heebner, Dean and Professor of Pharmacy, Ontario College of Pharmacy, Toronto.

Herman J. Lohmann, Dean of the Department of Pharmacy of the University of the State of New Jersey, Jersey City.

Clair A. Dye, Associate Professor of Pharmacy, College of Pharmacy of Ohio State University, Columbus.

E. V. Howell, Dean and Professor of Pharmacy, Department of Pharmacy, University of North California, Chapel Hill.

Teachers in Some of the Pharmacy Schools and Colleges.

Charles B. Sears, Auburn, N. Y., president New York State Pharmaceutical Association.

William E. Warn, Keyport, N. J., president New Jersey Pharmaceutical Association.

A. V. Pease, Fairbury, Neb., president Nebraska State Pharmaceutical Association.

Joseph L. Lemberger, Lebanon, Pa., president Pennsylvania Pharmaceutical Association.

J. F. Wagner, Garden City, S. D., president South Dakota Pharmaceutical Association.

Jacob Schrodt, Dallas, Texas, president Texas State Pharmaceutical Association.

T. C. Bayse, Rockport, Ind., president Indiana Pharmaceutical Association.

Harry Dick, Lawrence, Kansas, president Kansas Pharmaceutical Association.

C. L. Jackson, Newton, Miss., president Mississippi Pharmaceutical Association.

Presidents of Some of the State Pharmaceutical Associations.

Three Prize Papers on the Sale and Fitting of Trusses.

Those druggists who have really made a study of the fitting of trusses, and have devoted themselves to pushing the line, have found it to be one of the most profitable departments in their stores. Failure usually results from indifference and neglect. In order to show how success can be realized we recently offered two prizes for the best papers by experienced druggists—papers in which they should tell what methods they had used in building up a custom in the sale and fitting of trusses. The prize committee thought a third paper among the entries was worthy of an award, and so we are now printing in this issue of the BULLETIN all three contributions. They will be found full of suggestion and profit.—THE EDITORS.

THE FIRST PRIZE PAPER ON TRUSSES.

BY R. J. PERRY,
Parker's Prairie, Minnesota.

Yes, I sell trusses. I fit them also. The selling and fitting of trusses are two different propositions. One is merely a commercial transaction; the other requires knowledge and skill and involves a responsibility. My first

R. J. Perry.

acquaintance with the truss business came some forty years ago, when, as a boy working in a city drug store, I was called upon to clean up and sort out a job lot of trusses which had accumulated in an old closet. I had to tighten screws, adjust pads, repair leather covers, and rebuild whole trusses from parts of broken ones. It was a tedious and dirty job, but when it was completed, I knew more about the making of a truss than any one in the store. The task I then grumbled at has proved of much value since.

Years later, in my own store, I decided to put in a line of trusses, as I believed there was money in it. A Dr. Johnson, an itinerant "rupture specialist," visited our burg once a month and raked in the coin by fitting trusses, for which he charged big prices. Once he announced his final visit; I called upon him and asked him if he really meant it or whether it was an "Adelina Patti farewell." He said he meant it and suggested that I take over his local patronage. Said he:

A PROFITABLE LINE.

"It's easy work if you once learn how and there's good money in it. Pick out a good dependable style of truss and learn what *it* will do and what *you* can do with *it*. I don't pretend to doctor anything but ruptures and only to fit trusses to them. I'm not a graduated doctor, but as I was in the business before medical laws were passed I have an exemption certificate under which I can work. Unless you are a licensed doctor, or can arrange matters with your home doctors, you cannot charge for fitting trusses. Better look the law up and make sure of your position first."

I looked up the law and found that only licensed M. D.'s could fit "appliances," but my lawyer told me that so long as I made no charge for my services, I could not be interfered with. However, the local physicians were interviewed and not one objected to my proposition; in fact all encouraged me to stock up and some offered to refer patients to me if I proved successful as a fitter. One of them frankly admitted that he did not know how to fit a truss and apparently could not master the knack as he had no mechanical faculty in his cerebral make-up.

From a friend, who had for several years been one of the surgeons of the Schnedicker and Miller Rupture Treatment Companies, came the suggestion that the most satisfactory truss was the kind known as the "silver bronze Sherman style," at that time put upon the market by the Penfield Co. He further advised me to thoroughly study the anatomy of ruptures, their symptoms and diagnosis, the mechanism of their reduction, and especially their retention by trusses.

Well, I waded into the subject; borrowed Gray's Anatomy and half a dozen books on surgery, and after a month of study was ready to stand an examination. Sherman's truss I found was sold wholesale at $24.00 a dozen; when fitted to the patient and sold with a guaranty to retain the rupture and one year's repairs free, the price was $15.00 per each—not a bad profit. This was the regular price all over the country and I could see no reason for cutting prices. I got that price twenty-five years ago; I get it to-day.

STOCKING UP.

When ready to stock up I left the store in charge of my clerk and spent a week with my friend the rupture specialist, and from him got much practical "laboratory" work in fitting trusses to actual patients, running from five to ten cases daily. On my return home I purchased small sample lots of several different styles and stocked up pretty heavily on the Sherman style. Upon their arrival an announcement of my new department was made in the local papers. I advertised to supply any truss made at the regular price, but featured the Sherman truss, *under my own trade mark,* and stated that when fitted to the patient *by me personally* I would guarantee it to hold the rupture at all times and under all conditions and to keep it in repair free for one year. The first month I fitted enough trusses to pay for my entire stock!

FITTING A TRUSS.

To fit a truss. First determine the kind of rupture your customer is suffering from. Secure a perfect reduction of the hernia and make sure that the canal is empty of intestine, omentum, or other abnormal contents. Unless the canal can be perfectly emptied do not fit a truss; send the customer to a competent physician for proper treatment, as a truss applied under such conditions will surely make trouble for both you and your customer. With the patient lying down, apply the truss just as it comes from the factory, and then while it is on the body adjust the pads to cover the inner ring and upper part of the canal; with your hands bend the wire spring so it will hold the pads over the right spot, then fasten the pads in place so that their surface presents the pressure in a direction upwards, inwards and backwards, or at right angles to the plane of the canal at the inner ring. Fasten the back strap and then test the retention action of the truss.

Have your customer, while still lying on the table, give several sharp, spasmodic coughs. If the intestine enters the canal your adjustment is faulty and must be done over until this coughing test is met with. Now let the customer stand on his feet and pass the coughing test. Then bend forward, to the right, left and backwards, then squat, step up on a chair and *jump* down. If all of these tests are met satisfactorily tell him to go about his usual work and carefully watch the action of the truss. After it has been worn a little while the body heat will relax the spring somewhat and it may need readjustment. Warn the customer not to "monkey" with the truss, but to come to you if anything goes wrong with it.

Some of my experiences may be interesting. Errors of diagnosis were frequently found. People came to me for trusses who were suffering from hydrocele, hematocele, orchitis, tubercular testicle, hernia testis, cryptorchidism, varicocele, etc. Many of these were already wearing trusses which had been fitted (!) by other people, but which failed to "hold the rupture." Such cases were referred to their family doctor or to some competent surgeon for treatment.

Many people came asking me to adjust trusses which they had purchased elsewhere and which failed to retain the rupture. Many of these had been "fitted" over the outer clothing; most of them were cheaply made and worthless as retention appliances. These I positively refused to adjust, telling the people I would not fit any truss but my own special style. The demerits of the "cheap" trusses were explained to them, and not infrequently they discarded their old trusses and took one of mine. In time it became generally understood that while I sold many kinds of trusses I would not fit or guarantee any but my own.

I was advised and have always found it the best practice to fit every case with a double truss. In single ruptures a blank pad, a large flat one, is placed over the normal side as a prophylactic measure. The pressure of a truss tends to throw the weight of the intestines towards the sound side, and as this is presumably no stronger than was the ruptured side originally, there is an increased probability of another rupture unless a protective blank pad be used. In double ruptures of course a double truss is necessary to retain both ruptures properly.

The matter of pads is an important one. These are of many shapes, sizes and materials, and it took considerable experience to learn to fit the right pad to a rupture. The pad must cover the opening of the inner ring and the upper part of the canal, be large enough to do this and of such a shape as to preclude the intestine coming out and slipping around. There are hard rubber, wood, celluloid, metal, *papier mache,* enameled wood, sponge-rubber and water pads; solid and spring pads; round, oval, ovoid, triangular, conical, spheroid, flat and three-finger-shaped pads. You can see the immense field of possibilities in pads.

THE CHOICE OF PADS.

For years I used chiefly the ovoid hard rubber pad. Lately I have used the ovoid sponge-rubber pad. The plain wood pad absorbed perspiration and dermal oil and became foul; the celluloid pad did not stand the wear and tear well; metal pads became corroded and made the skin sore; *papier mache* pads presented the same troubles as the wooden ones; enameled wood pads lost their enamel and became too rough; water pads leaked, flattened out and became useless. The ovoid shape was best suited to most cases; the other to atypical ones. Spring pads were preferred because they were self-adjusting to the various body movements.

I refused absolutely to recommend rubber or celluloid covered trusses because of the extreme difficulty in securing proper adjustment and the danger of damaging the covering material. Many wearers would try to adjust them according to directions and almost invariably cracked or burned the rubber or celluloid.

Quite a little revenue came in from repairs, such as replacing lost or worn screws, broken pads, furnishing new covers, etc. I soon learned that a broken spring could not be repaired satisfactorily as the soldering did not restore the strength of the spring and interfered with its "spring action." Repairs should be priced in accordance with the original price to the customer of the truss repaired or the truss from which the repair parts are taken. A pad for a ten-dollar truss should be priced just the same when placed on a two-dollar truss as when placed on one of its own style. The price of the component parts of a truss must bear a definite ratio to that of the whole. A small stock of pads, covers, springs and repair parts should be kept on hand.

I read and studied the literature of every advertising truss and rupture specialist. Having acquired a local reputation as a truss fitter, many people came to me for my opinion concerning these advertisers, and I have never hesitated in telling the truth—that most of them are frauds. I would advise any druggist taking up this line of work to investigate along the same lines, expose the humbugs, and boost his own truss.

A SPECIAL ROOM ADVISABLE.

If you undertake to fit trusses you will need a private room which can of course be used for other purposes. In this room you will need an examining table, with cushioned top, two or three chairs, a warm rug on the floor, stove or other heating arrangement, and your work bench for repairs, assembling, etc. Keep your stock of trusses in heavy paper-board boxes, protected from light and weather, dust and insects.

You can fit ladies if they see fit to come to you, but it is a good idea to have another lady present whilst the fitting is going on. The prices of trusses for women and children are

the same as for men; the first cost of the truss is the same, and usually there is more trouble and bother in fitting them.

Having taken up this line of work let people know about it. Advertise the fact to the public in the newspapers and by special circulars directly to those whom you know to be in need of your help.

THE SECOND PRIZE PAPER ON TRUSSES.

BY JACOB SCHRODT, PH.G.,
Dallas, Texas.

Possibly seven out of ten men should wear a truss or submit to an operation. Notwithstanding that fact, for many years I went along believing that a truss was one of those unprofitable articles which a druggist was obliged to carry in stock and sell in a perfunctory way like many other articles of merchandise.

THE START.

But one day I awoke to the fact that the majority of the human race needed a device to reduce the danger that comes from strangulated hernia and to make life more comfortable. For several months I made a study of fitting trusses and decided it was worth the time in a financial and educational way to push the sale of trusses.

I fitted up a special room for the purpose. The expense of furnishing such a room need not be great. And one is well repaid in prestige which comes to a druggist who has the proper facilities for fitting trusses. A person suffering from hernia naturally is skeptical. This is possibly due to his having purchased some appliance that would not hold well. He may have bought a truss from some one that knew very little about fitting, and the result is a discouraged and dissatisfied customer.

We wish to begin right. The first impression that a customer receives is usually a lasting one; so I always try to impress customers with my ability to properly fit them. Once you get their confidence, it is very easy to make a sale, especially if you do your part, or rather understand your business. You must understand the mechanical construction of the particular appliance you sell and fit. Then it is easy to make the sale and very few failures will result. I have learned that to get the best results from wearing a truss it is necessary to insure the proper fit. One must take accurate measure and adjust the shape of the truss so that it will conform to the body. For there are no two persons whose hips are shaped alike, and each person must be fitted accordingly. I sell and fit only one make of truss.* It is easier to give satisfaction by that practice than by selling several makes. It also helps me to convince the customer that I believe in what I sell, and avoids confusion in his mind as to the one to buy.

GUARANTEEING EACH TRUSS.

An absolute guarantee is given with each sale we make, that the truss will hold the hernia. If it does not, the person wearing it may bring it back any time before the expiration of thirty days. This we believe is the strongest guarantee given by any one, and is just a little more than any I ever heard of, but has proved quite the proper thing. We do not expect to please and fit every customer we have. It is impossible to do this, but one can fit the majority of people.

If upon examination you find adhesions, and that the hernia has not been reduced for some time, do not attempt to fit that man with a truss. Rather advise him to consult some surgeon, and both you and he will be better satisfied.

The truss I fit is so constructed as to hold at the internal ring. This is the proper place at which to support a rupture, and not at the external ring, as the latter would allow the internal ring to be open, and the pressure would be on the gut. Thus you would never get a cure, much less make a sale.

In spite of the fact that one of the best authorities, a great many years ago, advised that a pad should be placed over the internal ring, the idea has not been given much thought apparently by the majority of manufacturers.

For the amount of money invested, and the amount of free advertising we get, the proper fitting of trusses pays well. Aside from the trusses sold, it brings business on other articles, for it attracts people to the store who could be induced to come in no other way.

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*This truss is "The Smithsonian," and is made by the Smithsonian Truss Co. of Topeka, Kansas.—J.

THE THIRD PRIZE PAPER ON TRUSSES.

BY M. L. McCULLOUGH,
Oxford, Pa.

My brother and I are in the drug business in this town of twenty-five hundred people. We have a good trade, carrying but two sidelines: cigars and trusses.

Does it pay a druggist to carry a stock of trusses? Certainly! At least, we have found it, or rather made it, a very satisfactory and profitable part of our business. How have we done it? Well, I will try to tell you, briefly.

THE STOCK.

First, as to stock. Several years ago we carried several kinds of trusses. Now we have *only* the hard rubber, because we have found it the most satisfactory in every respect, especially in one particular, which I shall speak of later.* We carry only a few trusses of each size, ranging from 26 to 38 inches. Children's and double trusses we do not keep in stock, finding it more satisfactory to make the necessary measurements and order directly from the manufacturer. We are so situated that we can get them in a few hours.

WHERE THE BUSINESS COMES FROM.

Having the stock, how did we get the trade? Partly, of course, by advertising, the local newspaper proving to be our best medium. When we consider that one in every fifteen persons in the civilized world, at some time in life, is affected with hernia, that the majority of these people are compelled to wear trusses constantly, that the average life of a good truss is seven years, and that the affection is common to people of all localities at all seasons, we know that a large and stable business is being done by somebody, somewhere. Why should I, why should you, brother druggist, not have a share of this business? We should and we can; but we must go after it. It is always about us. Often persons are passing our doors on a costly trip to the distant specialist to be fitted for a simple form of hernia which you or I, their local druggist, could do just as satisfactorily and at much less cost to them. Yes! Let the people know that you are in the business and you will get some inquirers.

*The truss we carry is the "Seeley," made by Chesterman & Streeter, 25 Eleventh St., Philadelphia, Pa.—M. L. McC.

Then having stock and customers, is this all? Oh no! This is only the beginning of either success or failure according as you, Mr. Druggist, prove equal or otherwise to the occasion. No one need hope to make a success of fitting trusses until he first has a fairly accurate knowledge of the *cause, nature, forms,* and *possible results* of hernia. This can be acquired by carefully studying some good authority on the subject.

Having the theory, add to it five other es-

M. L. McCullough.

sentials, viz., *common sense, care, gas-jet, cold-water-spigot,* and *measuring tape,* and your equipment is complete. Having examined the hernia and found it to be within the realm of mechanical treatment, make careful measurement of body on the line of the hernia, and select the truss. Use common sense in the work, remembering that a coal-heaver will require a more rigid spring than a bookkeeper.

CAREFUL FITTING NECESSARY.

Any one who has worn a truss, or has had much experience in fitting trusses, knows that a small fraction of an inch misplacement of a pad or slightly too much or too little pressure means trouble and dissatisfaction.

In the care of fitting, and the assurance we give to each customer that we will gladly adjust and readjust the truss until it is perfectly satisfactory, is, I am sure, the secret of our

success in the business. No customer of the druggist appreciates more sincerely the "make-good" plan, and if satisfactorily fitted, advertises you more effectively than does your truss customer.

Often a truss of the right size and shape fails to fit as you know it should, and carefully examining the contour of the body, you find some irregularity of form which causes the trouble. Then it is that the *best* feature of the hard-rubber truss is seen. It can, with care, be fitted to all of these irregularities. Pass the part you wish to shape carefully through a gas or alcohol flame until you think the desired change is made; then, still holding it firmly, place it for a few moments in cold water until its form is fixed. In my twenty years' experience I cannot recall one case of a truss being brought back and definitely left on our hands. We have tried to give satisfaction and have succeeded.

A SATISFIED CUSTOMER.

To-day, as I am writing this article, a gentleman came into the store suffering from a truss that had been fitted, or rather mis-fitted, on him yesterday. At a glance we saw the truss was too large for him. It had been purchased from us but was not fitted by us. We replaced it, without charge, and sent the customer away comfortable and happy. Will he remember that? Well, he will and to our advantage, too!

Oh! yes, if you give thought and care to the fitting of trusses, it will pay you. IT HAS PAID US.

CAREFULNESS IN PRESCRIPTION WORK.

Twelve Cardinal Rules to be Followed in Dispensing—Habits of Care and Precision which Should Be Cultivated by Men Engaged in Compounding.

By OTTO RAUBENHEIMER, Ph.G.,
Brooklyn, N. Y.

In prescription work I follow 12 cardinal rules. They are:

1. *The reading of the prescription directly in front* of the messenger or quite especially the patient should be avoided, if possible. Frequently, very frequently, as every dispensing pharmacist knows, the prescriptions are not written very plainly or distinctly, and any hesitation on the part of the pharmacist, either by motion or expression, is very apt to shake the public confidence in both pharmacist and physician. Should there be any doubt about any ingredient in the prescription or for any other cause, then it is best to inform the patient that the medicine will be sent to him.

2. *Writing name and address of patient on the prescription.* In case the physician has neglected this, then the pharmacist should do so, as thereby the prescription can be easily identified. Furthermore, this will be a help when compiling a mailing list of customers.

3. *Writing of the label* should be done next. This has the following advantages:

(*a*) It gives the pharmacist another opportunity to carefully read the prescription and directions.

(*b*) It brings to notice any overdose or incompatibility.

(*c*) It allows the ink on the label to become thoroughly dry by the time the medicine is finished.

4. *The compounding of the prescription,* in my opinion, should be done behind a closed or partly closed prescription counter or even in a separate room. Although this somewhat secret procedure is not followed by some pharmacists, I believe it is better for the patient not to observe how his medicine is dispensed.

To illustrate this more fully, I might cite the following instances:

(*a*) The prescription calls for a portion of a proprietary preparation. Would it be well to let the patient see how you fill the bottle from the ready-made package?

(*b*) The prescription calls for a single ingredient, which merely requires the weighing out of a simple article, say one ounce of powdered boric acid. The physician evidently does not want the patient to know that he is ordering boric acid. If he did, he would not have given him the prescription but told him verbally.

(*c*) Should you measure an ingredient in full view of the patient and you accidentally measure more than required and you pour some back into the stock bottle, then this procedure would give the patient the impression that you are not a careful dispenser. The same is true in weighing.

5. *All ingredients entering the prescription* should then be brought to the dispensing counter, as this acts as a check. In doing this the names of the ingredients are read on the prescription, are again read when bringing the articles to the prescription counter, again when

Otto Raubenheimer. Ph.G.

dispensing, and again when returning the containers to their proper place.

6. *The weighing and measuring should be done carefully and accurately.* I am very sorry to say that a great deal of guesswork is frequently done at the prescription counter. When the pharmacist once gets into this habit, it is very difficult to break him off it.

7. *The compounding should be done with skill and neatness.* I have seen pharmacists behind the prescription counter who were graduates and doctors in pharmacy and were doctors of philosophy, but who made a terrible muss when compounding mixtures, powders, pills, etc.

8. *Do not be disturbed when compounding* a prescription, either by conversation or store duties, as this will distract your attention from the prescription and thereby give rise to errors.

9. *The checking follows the compounding.* Having the ingredients and quantities freshly in mind, the dispensing pharmacist should be able to recall them from memory and thus check the prescription with another clerk or assistant.

10. The next very important step is to make, if necessary, *a notation on the prescription,* so as to assure the preparation of the medicine in the same manner when repeated. The rotation in which the ingredients are mixed can be done by prefixing them with numbers 1, 2, 3, etc. The size of the capsule or cachet should always be recorded and in capsules one should indicate whether "dry" or "mass." In pills it is necessary to note the excipient used and also the weight of the finished pill mass. Every pharmacist knows how annoying it is to have the patient bring back the capsules or pills with the grievance that they differ in size from the last lot, or that the mixture has formed a precipitate, while the last time it was compounded it was perfectly clear.

11. The carefulness of the dispensing pharmacist should extend to the *selection of the container.* For instance, mixtures which are to be protected from the light should be put in amber bottles, and medicines marked poison on the prescription should be dispensed in special poison bottles. When the physician orders an internal medicine and an external application at the same time, and often in the same quantities, it is a safeguard to dispense the external use preparation in a bottle of different shape or different color. As an illustration I submit the following two prescriptions for the same patient, received at the same time only a few days ago:

(1) Tinct. Echinac. Angust., 1 fluidounce.
Signa: Ten drops in water after meals.
DR. N.

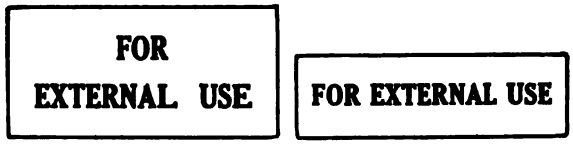
(2) Lig. Cresolis Comp., 1 fluidounce.
Signa: Ten drops to 4 fluidounces of water, for local use.
DR. N.

The principal danger in these two prescriptions lies in the fact that in each case the dose is ten drops, to be administered internally on the one hand and locally on the other. Should both of these prescriptions be dispensed in bottles of the same size, the same shape, and the same color, it might give rise to confusion, especially since the color of tincture of echinacea and of compound solu-

tion of cresol is about the same. As one of the careful pharmacists, I took the special precaution to dispense the tincture of echinacea in a regular one-ounce prescription bottle, but put the one ounce of compound solution of cresol in a *different shaped two-ounce amber bottle.* I did that to prevent confusion on the part of the patient. I thereby used *three safeguards,* namely, *bottles* of *different shape,* of *different size,* and of *different color.* Some countries even have special laws to that effect, so that a preparation for external use can be readily distinguished from a medicine for internal administration.

Sometimes it happens that a physician orders pills or powders for different patients in the same family. In order to avoid confusion I select, in such cases, different colored boxes.

12. Last, but not least, the *labeling and finishing should be done neatly.* I have always been in the habit of writing the number of the prescription also on the back of the label. This helps to reveal the number when the medicine is to be renewed and the label is badly soiled. I also mark the number of the prescription on the bottom of all the pill and powder boxes, showing that box and cover belong together and helping to detect any confusion in the directions. Besides the customary external use labels, I also attach, as an additional safeguard, bright orange-red labels with heavy black letters, which I had made in two sizes:



Conspicuous labels consisting of black lettering on a red background.

I have adopted this idea from a custom in France, where this orange-red label has been made compulsory by a ministerial *décret* of June 25, 1855, owing to the many confusions between external and internal preparations. Particulars can be found in French Codex, 1908, pp. 950-952.

In conclusion, I again want to reiterate that *carefulness should be the watchword of every pharmacist* and that constant vigilance should be exercised in the compounding of prescriptions.

It is furthermore necessary that the preceptor in the store and the teacher in the college should take special pains to impress the apprentice and student with the great responsibility of the pharmacist to the public. When this is understood and practiced, then the pharmacists will be more professional and will be more respected by physicians as well as the public.

TOM, DICK, AND HARRY.

By MAXWELL BUKOFZER.

Tom is a druggist to the core,
He calls his own a little store,
That yields a living and no more.
If Tom, whose business is not large,
And, hence, a clerk cannot support,
Leaves for an hour his spouse in charge,
Woe! there is trouble with the "Board."
For did not she—the ghastly crime!—
Illegally acquire a dime,
When she, for fever, ague and chills,
Dispensed a box of quinine pills!

Dick runs a paint shop right next door;
Of course, of drugs he knows no more
Than Tommy does of Hindu lore.
If Dick, whose business is not large,
And, hence, can just a boy afford,
Leaves him all afternoon in charge,
There is no trouble with the "Board."
What of it, that the boy's been seen
To sell, unlabeled, Paris green
In paper bags? Dick gets the dough.
He's not a druggist, don't you know!

Now, Harry never kept a store,
As scribe he ambled to the fore;
He grinds out formulas galore.
When Harry from his throne called desk
Tells womenfolk how to preserve
Their nose from wrinkles, why, his task
Is as stupendous as his nerve.
He knocks poor Tommy every chance,
While never giving Dick a glance,
And though his brain leaks through his fist
He poses as a "philanthropist."

The moral is, if you should query:
There is between Tom, Dick, and Harry
In this great country of the Free,
A diff'rence that the Blind can see!

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

(*Continued from April* BULLETIN.)

CHAPTER V.

SCHEMES AND SIDE-LINES.

When a man is trying to make a financial success of a drug store in a country village of 2000 people he needs to sell almost anything that those people will buy at a profit to the store.

My store carried a good drug stock, but it

Frank Farrington.

did not stop there. It handled stationery and books of course, and as opportunity offered I tried out various side-lines, some of which proved profitable and were retained, and some of which were later discarded as unprofitable.

SOME UNUSUAL SIDE-LINES.

I made a nice little profit out of a Rambler bicycle agency for a time, although I did not carry any stock. When the so-called bicycle craze subsided, I let that business go.

Agencies are pretty good profit makers for the man who is something of a salesman. I found that I could sell a few typewriters, and I held an Underwood agency for several years until the company discontinued selling through such sub-agencies. The machines were sold at full prices and afforded me about 25 per cent profit. For the druggist who handles stationery the line of typewriters is a good one.

He needs a machine of his own with which he should be familiar, and he should be able to demonstrate its efficiency to some extent. Being right on the ground, he is in close personal touch with many acquaintances who are talking of getting machines, and they will buy through a local agent rather than from an outsider if they are pleased with his machine. In cases where the customer is too much for the agent to handle, he can call in a company salesman to close the deal and divide the profits.

Schools and public offices are good typewriter prospects, and an exchange in which their old machine is taken pays the agent just as much profit usually as a sale. There are a good many standard machines which will establish local agencies.

TYPEWRITER SUPPLIES.

Along with these goods a line of typewriter supplies may be carried, or they may be handled without any agency of a machine. The stock does not run up into a large sum of money. There should be ribbons in black and purple, record and copying, for all makes of machines, though the same ribbon fits several machines, so that this does not mean separate

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numbers for all possible makes. Ribbons are easily sent by mail at low cost, so that the stock can be filled up two or three ribbons at a time.

The best way to work up the supplies business is to canvass every local typewriter user

Mr. Farrington's present home in Delhi.

at least once a month. Of course outside agents are doing this in your town all the time, but the dealer who gets busy and covers the ground can get the business, and if he is at all successful he will soon find that many of the agents are skipping his town as unprofitable.

Ribbons pay a first-class profit, good grades costing about $5.00 per dozen and retailing from 75 cents to $1.00 each. Typewriter papers should be sold at list, from which the dealer receives 40 per cent and 2 per cent. Job lots do not develop trade so successfully as does a standard line of good papers in boxes with the number on each box, so that the user can come back and get another box of the same paper by simply noting the number. Users of paper who buy by the box are very apt to want to duplicate the same exact paper, as they will be making up some document in which they want to use identical paper for all pages.

FOUNTAIN PENS.

Fountain pens are very generally sold in drug stores, and I found the plan of keeping the stock full of great help. A good stock makes more sales than a small assortment. It impresses the customers, and it is more likely to attract the attention of visitors who did not come to buy pens. I adopted the policy of letting all pens go out on ten days' trial free, with the privilege of returning them at the end of that time if not satisfactory. Of course when a man showed enough interest to take a pen and try it for ten days we expected to make a sale eventually. We would exchange pens with him as many times as might be necessary to get one that suited him, even sending to the factory to get one specially adapted to his needs or fancy.

The manufacturers kept our stock in shape. Any pens soiled or marked in trial were done over without expense, and we issued a very liberal guarantee with each pen, agreeing to replace at any time within a year any part except the gold pen if broken by use, misuse, or accident. The line we carried gave us 40 per cent discount from the list prices and ran from $1.50 to $7.

Of course we carried cheaper pens at 25 cents, 50 cents, and $1, but we never recommended or guaranteed them. If a man wanted a cheap pen and would not pay more than it cost, he got it, but he took all the risk himself. We only warranted the cheap ones to work when delivered to the buyer. Of course if a customer came back with one that had developed a manifest imperfection we took it back and returned it to the maker for credit.

Some outdoor signs made by painting packing case tops white and then lettering them simply.

Fountain pen sales help the sale of fountain pen fluid and fillers, and we made it a point to

tell customers that we had the best ink for that pen, and they came back for it.

HOW TO HANDLE CANDY AND GUM.

Candy is scarcely a side-line in a drug store. It is one of the standard lines and a good one. Perhaps not all drug stores, though, realize the importance of handling it right.

First there should be an agency for one of the high-grade and popular advertised kinds, something standard. This will retail at 80 cents a pound. Then there should be a cheaper line at 50 cents or 60 cents, and another popular box of about a pound for 35 cents. And there ought to be always on hand a full supply of attractive 5- and 10-cent packages which should be displayed on the counter with cards on them.

Window displays of these goods can be made most attractive. I know of nothing you can display in the window that will bring people in as quickly as candy, opened so that it will make people hungry to see it. Chewing gum is usually neglected and shoved into a corner. Get it out and push it. Put it in the window with a large card that every one can see, and you can quadruple the gum sales.

It pays to carry all kinds of gum for which there is any demand, and a good way to arrange them if space is limited is to have a large tray that will show several sticks of all makes and keep the entire assortment in it in a very conspicuous place. Have it so that people can help themselves when you are busy and throw down their nickel and not be obliged to wait.

Let it be understood that every box of candy you send out is warranted fresh, and that if it turns out otherwise it is the fault of the manufacturer for sending you a poor package, and take it back without a word and refund the money or hand out a new package. If you are doing business with a maker who will not stand behind your guarantee, change brands.

THE BOOK QUESTION.

Even dealers who do not handle books will find it profitable to put in a line of the popular copyrights that sell everywhere now for 50 cents and include all the popular novels of a year or two ago. There are hundreds of titles in these, and they can be bought from 35 to 38 cents according to quantity. A rack of them kept full of late titles will make sales in any drug store.

The circulating library scheme usually proves a failure as far as net profits go. Of course anything that brings in more people may prove worth while even if it does not individually pay a profit. Still the circulating library should be viewed with suspicion unless there is a manifest demand for it. It takes up valuable space and is a source of much complaint on account of the difficulty in keeping on hand the books people want. I tried renting a library, and after a year or so threw it out. It was a money loser. I established a library of my own, and that also lost me money. I took one on a commission basis, and that failed to develop any business. If a man sells books he does not want a circulating library in the store anyway. I took the matter up because my chief competitor had one and I needed it in self-defence. I made a lower rate than his contract allowed him to

A Talcum Bargain

A pound package for what you've paid for 4 ounces

We are offering just now, while they last, the best value in talcum powder that we ever had.

It is a full pound of fine violet perfumed talcum in a pretty box with a raised sprinkle top for 25c.

We guarantee this powder to give satisfaction. If it isn't entirely satisfactory, it won't cost you a cent. We will refund your money on request.

We have lots of other kinds at 10c, 15c, 18c, 20c etc., but this pound package is the prize winner so far

THE FARRINGTON DRUG STORE

ALL POST CARDS

all next week

ONE CENT EACH

This means that all next week we will sell all kinds of souvenir postals for a penny apiece.

We have a great variety of Delhi view cards, comics, foreign views, state capitols, birthday cards, etc., etc.

See the new Delft Delhi Cards, regular 2-for-5c card. Next week one cent each.

No mail orders filled.

None sold to dealers.

FARRINGTON'S DRUG STORE

A PEN THAT WRITES

Who wants a fountain pen that won't write?

The woods are full of fountain pens that are called "Best" by their makers.

Lots of these pens are called anything but best by their users.

But when you find a man with a Parker pen in his pocket, you find a man with satisfaction in his swing.

We sell Parker pens at all prices from $1.50 up and we guarantee every one of them.

We'll let you take one for ten days and if you don't like it we'll refund your money.

Try one of the new "Jack-knife" pens, the kind that you can carry in your jack-knife pocket and it won't leak or get out of order.

For summer when vests are laid aside, a pen that you can carry right in the trousers pocket is popular. We have that pen." $2.50 for the best grade.

Come in and we'll show you how you can get a Park · pen for nothing

FARRINGTON'S DRUG STORE

A group of Farrington ads.

do, and this resulted in keeping my customers from patronizing his library and even brought some of his trade to me, but as a library for revenue only it was a failure. A man has to do such things sometimes. But if possible it were better to leave them alone and spend the time and energy on some legitimate line.

Among other lines which I developed with great profit were stock foods and veterinary remedies. Sporting goods paid for a time, but finally proved unprofitable on account of competition which specialized in that line. Fancy goods were thrown out for lack of room.

TEMPTING BUYERS.

One of the great reasons for the success of the department stores in getting women into the store is the fact that they always have something new to show to the people. A woman likes to go to a store that always has attractive little specialties on exhibition in the way of new things at popular prices. The drug store sells as many lines of goods that are alluring to women as any kind of a store, but the average druggist does not take pains enough to keep something new out in a conspicuous place so that there is always a temptation to the customer to buy.

I have put in many specialties temporarily, pushing them as long as they attracted trade and moved off rapidly, only to throw them out when they began to drag, replacing them with something different. The drug store cannot afford to give up space permanently to slow-moving novelties and goods that are salable only for a short time.

One little annual plan or scheme that I inaugurated that became a success as a business getter was an "Annual Talcum Sale." One week in May each spring I put out a special offer on some brand of talcum powder, often choosing a new line that I wanted to introduce, or some particularly good proposition secured by a quantity purchase. The price made always allowed a good profit, although it was usually an offer of a regular 25-cent box for about 15 cents. One season it was a full pound package.

I offered a $2.00 cash prize to schoolchildren for the best advertisement of school tablets written by a student in a Delhi school. I specified that the ad. must be entirely the work of the child submitting it and that it must be of suitable size to fit my newspaper space. Here are the two winning ads., the judge having decided that these two were of the same quality, and the prize being divided equally between them:

No. 1. TABLETS: SCHOOL TABLETS.

Tablets large and tablets small,
Tablets here for one and all,
Tablets here for you and me,
If you don't believe it, come and see.

Tablets here you're sure to find,
Cheap and of a better kind;
Farrington's the man to sell
Tablets, and he treats you well.

Money back if you want it.

No 2. ATTENTION!

It is hard for some children who buy tablets to decide which place to go. If you go to Farrington's once, you will have no doubt where to go in the future.
Rough and smooth paper.
Pretty and fancy covers.
Come and look them over every one.

FARRINGTON'S DRUG STORE.

Those are not bad advertisements at all for a school child to write—in fact their simplicity and directness is something of a model.

A little plan which stimulated the sales on writing paper was the use of the offer below. It was printed on both sides of a white card, size about 2 by 5 inches. These were mailed to the ladies in bright-red envelopes which they just fitted.

On one side of the card:

USE THIS CARD.

This card is good for five cents to apply on a purchase of either of the pound-paper propositions on the other side if used within ten days after its receipt.

FARRINGTON'S DRUG STORE.
(Over)

On the other side:

THE WAY TO BUY WRITING PAPER.

We sell a fashionable, linen fabric paper in the stylish shape and size for 35 cents per pound of 100 sheets. The envelopes to match are 25 cents for fifty. We sell the 100 sheets of paper and 50 envelopes for 50 cents.

This makes this fine paper cost you less

than you pay in buying an inferior paper by the box.

We have a low-priced fabric paper that we sell for 28 cents for 80 sheets of paper and 50 envelopes. This is a great bargain.

FARRINGTON'S DRUG STORE.

(Over)

TEACHING THE GROCER A LESSON.

Delhi has been a full-price town on patents since the Spanish-American war, when we made the imposition of the tax an excuse for raising prices to list. Recently, however, a cut-rate grocer came to town and proceeded to stock a half-dozen of the best selling proprietaries which he immediately advertised at cut rates.

The plan that I devised to make this work as much as possible to my advantage was this. I issued a circular letter to all of my mailing list, covering the whole town. In it I announced:

SOME SPECIAL PRICES.

Here's a chance to save some money at Farrington's. We offer bargain prices as below for a time. Look over the list and see if there isn't something on it that you need.

Then followed a list of the cut-rate patents at the same prices that the grocer had made. Also I included a number of other specials.

The effect of this letter was to get for our store the credit of the reduction in the prices and to bring us the business on them. Our letter reached the people before many of them had read the cut-rate newspaper ad., and while I made no mention of the matter in the papers and thus avoided antagonizing the grocer, I got the business. His sales were so slight on the patents that he never bought a second lot.

While poetic ads. are not as a rule very profitable, still something of the sort occasionally adds spice to the campaign. Here is one that I had printed on cards and mailed to users of typewriter supplies. With very little change it may be made to fit any line of goods and may be used as a newspaper advertisement:

REMEMBER JOHN!

John Jones it was who ran a bank
And ran it on the square.
He treated all, whate'er their rank,
In manner just and fair.

He borrowed from both rich and poor
Whatever they would lend.
He loaned to all who were secure
And wanted cash to spend.

But though so square, and honest quite,
John never read our ad.
And now his bank is closed up tight,
His face is long and sad.

Moral:

Though you may think you're short of naught
That we can well supply,
Remember John, and don't be caught.
Know when and where to buy.

Buy typewriter stuff, stationery and law blanks of Farrington.

Here is a plan that I used to stimulate cash buying and to promote interest in the candy department. It worked very satisfactorily for a time, but did not prove a permanent success. The public seemed to tire of it. The offer read as follows:

CANDY FREE FOR YOUR CHECKS.

The cash register checks we give out with all cash purchases are good for ten per cent of their face value in exchange for candy.

For instance, when you have bought a dollar's worth of goods, your check can be exchanged for ten cents in confectionery.

Why not get the benefit of this offer?

Anything you need that we sell ought to save you some money on a candy purchase. And every time you buy candy, you get a check which is good on the next lot of candy. A 40-cent purchase of candy gives you a check worth 4 cents on the next candy purchase.

Save your checks!

There is no better candy anywhere than we sell, and we guarantee every package to be fresh. If it is not satisfactory we will give you back your money.

Have you tried the Chocolate Dipped Maraschino Cherries yet? 25 cents a box.

The best business-getting scheme I ever worked and the ways in which I made use of the cash register as a business-getter will be described in the next chapter.

(*To be continued in June.*)

How the Druggist's Sundries Are Made.

SECOND PAPER: TOOTH-BRUSHES.

Where the Bristles and the Bone Handles Come From, and How the Brushes are Made by Hand in Europe—The Bristles Tied in by Peasants in Their Homes—Points to Consider in Judging the Goods.

By J. ADDISON BOWNE.

The editor of the BULLETIN OF PHARMACY has asked me to prepare a paper on the manufacture of tooth-brushes. Although I have been engaged in the importation of brushes for upwards of thirty years, it is difficult in a limited space to describe their manufacture, and particularly to tell how they may be judged and selected to advantage. The retail druggist has so many different articles to look after that it is almost impossible for him to give enough special attention to tooth-brushes to really enable him to determine their quality.

Furthermore, this is a technical business, and it would be quite out of the question for me to describe adequately the points necessary in the proper selection of brushes. This requires years of study, but some of the factors to be considered are:

1. Quality of the bristles.
2. Size and finish of the bones.
3. Shaping of the bones, artistic or otherwise.
4. The *tout ensemble.* The general appearance of the brush—does it please the eye, is it agreeable to handle, etc., etc.?

WHERE THE BRISTLES COME FROM.

In describing the manufacture of tooth-brushes, the first thing to consider is the bristles. As everybody knows, these are the hair of hogs or wild boars. Some of these boars grow to an immense size with a luxuriant growth of bristles along the back. The hogs must be at least nine years old before the bristles are of proper length and character for manufacturing purposes, and even then only those of the male can be used.

The bristles come mainly from Germany. The chief market is the Leipsic Fair every spring, which is attended by the largest manufacturers of brushes and dealers in bristles. The bristles are sold in casks, and the manufacturers wash, sort and dress them for their own use. Very frequently, if the color does not turn out to be as white as desired, acids are used to bleach the bristles. One must beware, however, of tooth-brushes in which the bristles are *too white,* for they are acid bleached, and in the process the life of the bristles has been destroyed. They are pretty to the eye, but are not durable. Select a brush in which the bristles are a *cream* white instead of a *dead* white.

Some of the best manufacturers, indeed, absolutely decline to use an acid bleach, because the bristles "mat" after being used a few times. As for the stiffness of bristles, many of the most prominent dentists deprecate the use of brushes in which the bristles are extremely hard, claiming that their continued employment cannot do otherwise than affect the enamel at prominent points. They advocate a reasonably stiff brush, but one not too hard.

THE BONE HANDLES.

The next thing to be considered is the bones used for brush handles. These are secured from the United States, Australia, and the Argentine Republic. Until within the last few years the United States furnished the larger part of the supply, but we are now killing our cattle so much younger than we did formerly that the bones are smaller and are consequently not so desirable for fine goods. Manufacturers have therefore been obliged to look to the other two countries for their supplies of the better grades.

For fine brushes, such as those made in France and England, the *thigh* bones of cattle are more largely employed. In Japanese goods, which are much cheaper, the *shin* bones are more generally used.

Every year both bristles and bones increase in price. This is because the demand is constantly increasing, while there is no additional increase in the supply. So far it has seemed

impossible to find a substitute for bristles, but it would look as if some other material must eventually take the place of bone in the handle. During the last few years celluloid has been used to some extent, even though it costs more than bone. If bone, however, continues to increase in cost, it seems probable that it will be replaced by celluloid or some other material yet to be discovered.

MAKING THE BRUSHES.

In order to explain the method of manufacturing bone tooth-brushes, you will understand that the bones employed are, with the exception of cheap brushes or those of small size, the thigh bones of cattle, each one of which makes six tooth-brush handles. There is much scope for skill and art in the shaping of handles, and there is a great difference between brushes in this respect. After the handles are shaped they must be drilled for the manufacture of the brush proper. First the face of the brush is drilled, and next the longitudinal holes are made; the latter start at the end of the head of the brush, and they engage every one of the lateral holes previously drilled. This drilling of the longitudinal holes is a question of hand labor and is a matter of real difficulty. This will be realized if you will take into consideration the fact that the drill employed is in the neighborhood of three or four inches in length, and has about the diameter of an ordinary pin. Unless it is very carefully manipulated, it is apt to fly out at either side of the brush head, in which event the piece of bone is absolutely spoiled for further employment so far as the manufacture of a tooth-brush is concerned.

After this shaping and drilling have been done, everything is in readiness for the introduction of the bristles. The bones so prepared are sent out to people within a radius of ten or twelve miles, who there, in their homes, put in the bristles. This work is tedious but not exceedingly difficult.

TYING IN THE BRISTLES.

In the first place, the "mounter" (as the person is called who does this portion of the work) must insert a piece of cord into the longitudinal holes, and at the last hole of the row nearest the handle must pick up the end of the cord with an excavating needle, which is very much like a miniature crochet needle. He must then tie a knot in the end of the cord, and with a crooked needle force this knot beyond the last hole, which thus can serve as an anchorage for that cord. Then, in every hole in the brush, he must pick up his cord with the "crochet" needle, making a loop: with his fingers he now takes the necessary amount of bristles, slips them under this loop, and pulls the thread through the longitudinal hole until the bristles, with the help of the fingers, are in position.

From the foregoing it can be easily seen that the stability of each tuft of the bristles depends upon the proper anchorage of the cords at both ends. If the "mounter" should break the cord in attempting to force too many bristles in a hole, and should fail to start the row afresh, the entire row of bristles is improperly fastened and is likely to come out during the first few times the brush is used.

The next operation is the trimming. This is done by a very ingenious machine, and constitutes, in the writer's opinion, the greatest advance in tooth-brush manufacture during the last 20 years. After this come the operations of polishing, stamping, boxing, etc., all of which are very simple.

THE ENGLISH OR "WAX-BACK" BRUSHES.

In the English style of brush, that having stripes in the back of the head, the process of manufacture is the same as the French up to the drilling of the longitudinal holes. Instead of the longitudinal holes, a very small circular saw is used, and with it the operator saws about half-way through the back of the head, each groove thus made engaging every one of the holes previously drilled in the face. The bristles are then drawn in directly with wire, this wire lying in the small groove or slot made by the saw. The slot is subsequently filled with wax and rendered impervious to water—hence the term "wax-back" by which these English brushes are known to the trade.

CELLULOID BRUSHES.

The brushes made of celluloid are almost entirely manufactured by machinery, and the bristles are fastened in by so-called "anchors."

But while the better goods of this class have given satisfaction, there have been imported so many cheaply made brushes, in which the manufacturers have employed very poor bristles, that the sale of the better grades has fallen off considerably. Even with these better celluloid goods, the bristles are inserted in such manner that the purchase of them is a lottery. This is for the reason that the "anchor" is such a very thin piece of steel that in forcing the bristles into the holes many of them are cut in half—a fact that is not discovered until the consumer has used his brush a few times, when he has that disagreeable experience of having the bristles come out in his mouth.

A NEW MACHINE.

A new system of manufacturing toothbrushes by machinery has been brought to the writer's attention. The bristles are forced into the holes by a piece of soft metal, thus preventing the cutting of the bristles. This metal subsequently hardens and absolutely locks the bristles in their proper position—locks them so tightly that it is next to impossible to pull them out with a pair of pliers. Each tuft is fastened independently of all the others. This is an American invention, and a number of machines are now in process of construction. The purpose is to make toothbrushes both with bone and celluloid handles, and I believe that we shall see some of them marketed very shortly. By making brushes in the United States by machinery, we can overcome the proposition of cheap foreign labor, and by saving the *40-per-cent* tariff we can not only get brushes cheaper, but can in addition make better brushes than have ever before been produced. So far, however, practically all of the brushes on the American market have been made abroad.

"MY BEST PAYING SIDE-LINE."

The Third of an Important Series of Articles by Different Druggists in which Each Writer Tells what Class of Goods has Paid Him Best—This Time it is Razors and Shaving Supplies.

By CHARLES W. HOLZHAUER,
Newark, N. J.

One of the best paying side-lines we have featured has been razors of all kinds and shaving accessories. Shaving soaps, brushes, and lotions have always been sold in drug stores, and it is an easy step to add to these, razors and strops and all the other items which are used by men who shave themselves. And the fact that the man who shaves himself uses at least a half-dozen different articles, gives a very good opportunity for the sale, by suggestion, of several of them at one time, thereby increasing the volume of the sale. At least half of those who buy a razor will buy a strop, and who cannot make a sale of soap along with a lather brush? Beside these, a hone, extra blades if a safety razor has been sold, a stropping machine, talcum, witch-hazel, and bay rum naturally suggest themselves. A very good business may be worked up in the resharpening of old blades. The effort is worth while, for all shaving supplies as a rule pay a good profit, as good probably as any drug-store side-line.

USE A LEADER.

To call attention to the fact that we are headquarters for shaving materials, we make a leader of a razor for 49 cents. We bought a lot of razors from the importers which we could sell at this price and still make a profit. This at once attracted men to the store. Upon the same counter upon which these 49-cent razors are displayed we show razors up to $4.00. Very frequently the higher priced ones are sold, and we always make it a point to show them. At least quarterly we make a special window display of the goods, and always keep them in plain sight in the store

when there is no display in the window. Working with the window, a newspaper advertisement, preferably on the sporting page of the paper, announcing a special sale of razors will bring good results.

CO̊PERATE WITH THE MANUFACTURERS.

Nearly all manufacturers are glad to cooperate with the dealers in supplying material for displays, and it is generally very attractive —signs, cut-outs, dummies, and mechanical figures. Often the best windows can be made with these and a small stock of goods, thus avoiding overstocking.

Demonstrations are desirable. If it can be arranged a window exhibition is excellent, especially of some novelty. Here again arrangements can often be made with the maker of a razor to supply a competent man to show the goods. We have had splendid results from the demonstration of a self-honing strop.

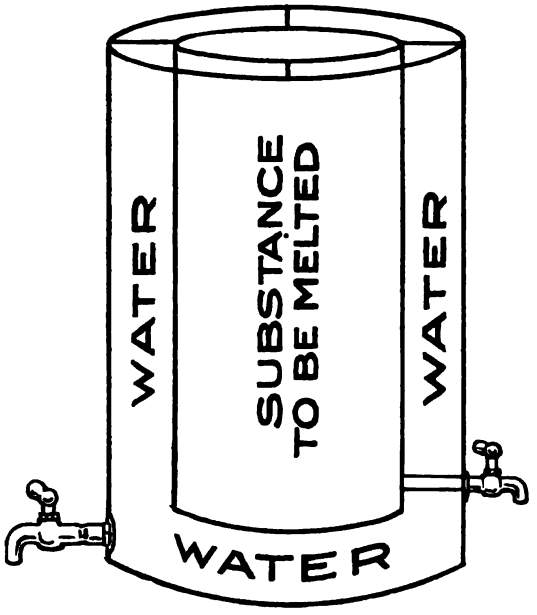
Once started, a steady business will follow, for men who use safety razors are continually buying blades and many of them, to say nothing of their other supplies which often require replenishing. The point is to keep the goods in sight. Let people know that you have them and are in a position to supply all their shaving wants.

A display of shaving supplies in the window of Charles Holzhauer.

DOLLAR IDEAS

FILLING JARS OF PETROLATUM.

Henry K. Schwartz, South Bend, Indiana: The accompanying etching illustrates a water-bath which we use in filling jars of petrolatum plain and petrolatum carbolated. The water



keeps the contents hot for a long time. The double faucet enables one to drain off the hot water and run in cold. The capacity is about fifty pounds.

CULTIVATING THE FARMER.

Daisy A. Frick, Audubon, Iowa: How many pharmacists find it hard, on busy prescription days, to keep the customer from becoming impatient when it is necessary to wait his turn! This applies more to drug stores in country towns where people rush in with prescriptions on Saturday afternoon, a time when the farmers and farmers' wives come to do their shopping and pay their weekly visit to the physician. Many of these customers are chronic patients. A cold and stormy day makes them rush in, and they are anxious to hurry out again. Each one wants his prescription filled right away so that he can get home.

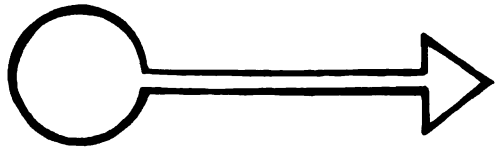
While the pharmacist is busy dispensing the prescription, let the proprietor or the other clerk invite the customer to a chair and talk to him about his stock. Ask him what he feeds, their general condition, etc. Ask him if he has trouble with hogs, whether they are suffering with worms, etc. Then talk stock food, worm remedies, and poultry food.

Almost every country drug store carries stock food and remedies as a side-line. And it is surprising to note the results of these personal talks with the farmers while they are waiting for a prescription to be filled. Many a sale can be made that would otherwise escape, and these customers, once made, are usually repeaters for the same line of goods.

In addition to the personal talk on the inside, a nice business can be developed by driving into the country and making personal visits to the homes of the farmers, soliciting sales of stock foods and stock remedies.

AN INGENIOUS CORK REMOVER.

George Sines, Pomerania, N. J.: Here is a simple little cork remover that is easily made. Take a piece of wire and make a little round finger grip in the end of it. Set the other end of the wire on a solid piece of iron, and with a hammer flatten it out into the shape of a spear-head. The sides of the spear should



be sharp and should taper to a point, but the upper surface should be flat. When a corkscrew won't remove a tight fitting cork, instead of pulling out the cork piecemeal, I use this spear cork remover. I force the head down clear through the center of the cork, turn the finger grip, and pull. Out comes the cork.

SELLING CORN PADS.

Ray S. Sisson, Decker, Indiana: When a customer asks for a corn salve or remedy and a sale is made of a ten- on twenty-five-cent item, don't stop there. Show the purchaser a package of unmedicated corn pads. Explain that by using the medicine inside the pad the drug will not get rubbed off and will have a better chance to act. In this manner the remedy can be used both day and night, thus hastening the cure. Nine times out of ten you can make an extra sale in this way.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THE COAT SHIRT RUINING THE DRUG BUSINESS.

DEAR BILLIE:

There has been a matter of great importance on my chest for some considerable time, and unless I get rid of it in some way it is liable to result in a case of pneumonia or worse.

In the many years gone by, I remember what a fine return we received from various hair tonics, and what a large number of men were noticeably bald-headed. It seemed to my young eyes that nearly every man past forty was more or less bald, and that we had rich material to work on. Many and many a nice preparation costing twelve or thirteen cents we unloaded on the bald-headed man for one dollar per. We felt proud of our business sagacity, and frequently we wondered why the boss didn't raise our pay when we sold five or six bottles in one week and then got the victims as steady customers for many a succeeding bottle.

On re-entering the business again some years ago, my first thought was for these old income-bringing formulas, and I proceeded to make a variety of both the dry kind and the wet kind, the sticky kind and the quinine kind. But they did not sell well, and some men even insinuated that I had better mind my own business instead of always suggesting that my "Hair Invigorator" would do them good. I became discouraged and quit trying to sell the stuff, but I did *not* quit the problem, and I will now bring it before you.

THE COAT SHIRT is the sole and entire cause of all our loss of income from hair tonics, and we must organize and push the coat shirt and all its modifications into the far western sea. Put the coat-shirt people out of business! If we break them let us extend the hand of fellowship and set them up in the drug business, but never let it be said that a set of men who will work nineteen hours a day for seven days in the week and all the rest of the year for less compensation than a side showman at a circus are so weak-kneed as to stand this curse any longer.

Among the office force of a manufacturing pharmacist was a man of fine appearance who was asked quite often to chaperon parties through the works. It was his custom to keep a nice shirt of the old top-and-bottom type handy in the back office, and when called on to come to the front and chaperon any guests he hastily slipped on his fine shirt and was ready to fare forth. It was noticed that he kept getting balder all the time, and finally the attention of the whole force was turned his way as furnishing a very interesting subject for solution.

Without going through with all the wearisome details of the story, suffice it to say that it was finally proved beyond reasonable doubt that the whole cause of the man's baldness was the friction set up in pulling this shirt over his head. In giving it a quick flirt off and on he very materially raised the temperature of his hair and head, induced dryness of the scalp, breaking of the hair and subsequent baldness. This suggested the manufacture of the coat shirt, and it has kept on till now a department store clerk looks in scorn at a man who mildly suggests that the "high-ball" shirt suits him the best.

Let us, then, band together to put down this menace. And in conclusion, Billie, if your head is bald, very bald, it redounds to your credit, for don't you see that the baldest man must be the one who has changed his shirt the most often?

Down with the coat shirt!

Meridian, Miss. GEO. W. STAPLE.

A REAL SUICIDE THIS TIME!

To the Editors:

A few years since, when I was clerking in a drug store in the central part of Iowa, a man, a stranger to me, came into the store and asked for a bottle of strychnine. After selling it to him and going through the usual formalities of making a record of the purchase of a poison, he asked me whether it was very poisonous. Of course, I informed him that it was, and that it would kill anything it came in contact with, meaning of course animals.

He went away, and I thought nothing more of the deal until the following morning, when

on my way to the store, I learned that a man had committed suicide in one of the hotels during the night. Being curious, as many people are about such things, and not having far to go, I went in company with others to the room where the suicide was. Much to my surprise, I found the man to be the identical person to whom I had sold the poison the day before. There he was, coat, hat and boots off. I saw one-half the strychnine there. The bottle was uncorked and lay on the window sill.

I said nothing to anybody, but went immediately to the store. As soon as my employer showed up, I told him the circumstances, how I had sold the man the poison with which he afterward took his life.

It is needless to say that the transaction was not wholly satisfactory to the proprietor because of the unsavory taint and the very liberal advertising the public generally gives the drug store where poison is obtained.

The man, however, must have been an old bachelor, or at least had no near friends or relatives, for much to our surprise and quite luckily for us, too, no one ever came to inquire into the matter. Thus we were saved considerable embarrassment. ARTHUR E. PRATT.

Waukon, Iowa.

REMOVING WALNUT STAINS FROM THE HANDS.

To the Editors:

A correspondent, E. A. L., in your issue of December, 1911, asks for something to remove walnut stains from the hands. I have had many inquiries about walnut stains, and some years ago I wrote to the *Chemist and Druggist* of Australia for information, and the editor replied:

"Two things occur to us that may be tried. First, wetting the fingers and rubbing them with crystals of hyposulphite of sodium, and then dipping them in a dilute solution of oxalic acid. This would generate SO_2, which might bleach the stains. Another method is to dip the fingers in a solution of permanganate, allowing them to soak for a few minutes, and then dip them in oxalic acid. We have found this to remove many obstinate vegetable stains."

The former treatment was fairly satisfactory when given a trial, though the whole of the stain was not completely removed. The latter has not been tried here. The trial of chlorinated lime was not a success, but it was not used with acetic acid as suggested by yourself. J. S. DODDS.

Akaroa, New Zealand.

WHAT ONE STORE DOES ABOUT SHORTER HOURS.

To the Editors:

From time to time I have read articles in your journal and in others on the subject of Sunday closing. Perhaps the method in vogue in our store may be feasible in some other store similarly situated.

Our Sunday hours are from 8.30 A.M. to 12.30 P.M., and from 5 to 8 P.M. Every Sunday, therefore, this store is closed from 12.30 to 5 P.M. These hours were arranged by the late Mr. Leo Eliel when he opened this store in 1900, and there has been no change and practically no complaint from our patrons.

The force works as follows: There are four of us in the store—manager, senior clerk, junior clerk, and apprentice. We divide into two shifts. One Sunday the manager and apprentice are on duty; the next the senior and junior clerks take their place. Thus each shift has every alternate Sunday entirely free of duty.

There is no unity among the stores of the city, each doing as the owner sees fit, and most of them keeping open all day.

South Bend, Indiana. EMIL REYER.

PRICING A PRESCRIPTION.

To the Editors:

In regard to the pricing of the prescription which appeared on page 126 of the March BULLETIN, I would say that the price should be computed by the time it took to fill the prescription at the regulation schedule of $1.50 per hour and twice the cost of the drugs. The prescription reads:

Strychnine sulphate	¾ grain.
Extract of aloin	8 grains.
Extract of belladonna	6 grains.
Extract of cascara	24 grains.

Make 48 pills.

In filling prescriptions of this description it is not always advisable, however, to charge

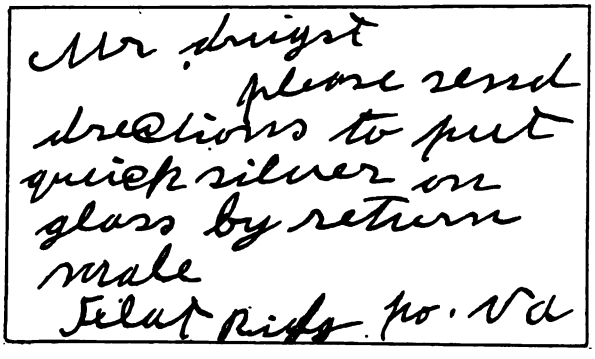
exclusively by the hour, as some prescriptionists can work a great deal faster than others. I think a fair price for the prescription would be 90 cents. JOSEPH G. NIXON, Ph.G.

Sylacauga, Ala.

A MALE JOB.

To the Editors:

Please try to find room for this one in your freak column. Don't you think it deserves



it? This reminds me of the story of the woman who "fell off a roof and injured herself on the back porch."

Marion, Va. CARSON DRUG CO.

ANOTHER SWINDLER.

To the Editors:

I wish you would notify the readers of the BULLETIN of an alleged doctor who is working the druggists of this State very smoothly. He comes to a druggist, rents a space in his store, tests eyes for glasses, and sells the glasses out of his case if he can fit people. If not, he writes a prescription, taking the money in advance, and stating that the glasses will follow in a few days from a certain optical company in Dallas. But he fails to turn in the order, thus getting away with the people's money. If he could be located, we would appreciate it greatly. CITY DRUG CO.

Weatherford, Texas.

To the Editors:

I wish to say that I am a reader of all the pharmaceutical journals, and that I find the BULLETIN best of all. I think it by far the best journal published, and I always look forward to its coming at the beginning of each month with the keenest of interest.

West Paris, Maine. L. Y. LOWE.

FLORAL DEPARTMENT.

I am paying up my BULLETIN subscription to May, 1913. Your journal is enjoyed by us knights of the pestle and mortar, from the stories of Algernon down to actual formulas and Dollar Ideas. With kind regards and best wishes for the BULLETIN OF PHARMACY, and hoping that you won't forget to jab my name down on your mailing list, I am,

Donaldsonville, La. ELMER L. GAUDET.

The BULLETIN is a source of a lot of information as well as a lot of pleasure. I don't see how any department could be improved. And why any druggist wants to cut out the humorous part is more than I can see; for we have little enough of the comic side of life anyway. I always enjoy the BULLETIN. GILBERT W. CLARKE.

Verona, Miss.

I am writing this to congratulate you on the many excellent features of the BULLETIN. The BULLETIN appears to be a necessity to me. My pharmaceutical digestion is always out of kilter until I have taken the monthly dose. F. W. E. STEDEM.

Philadelphia, Pa.

For some reason or other I failed to receive the BULLETIN this month, and unless it comes very shortly I shall have to suspend business. A. J. STRATHIS.

Doylestown, Pa.

We continue to find the BULLETIN the best journal yet, and don't want to miss a single copy. TURNER CANNON.

McKenzie, Tenn.

The BULLETIN seems to improve with every issue. It is a welcome guest once a month.

Beaver Falls, Pa. G. M. GRAHAM.

I receive five or six different journals, but yours I enjoy the most of all.

Arthur, Iowa. JESSE HENRICKSEN.

The best of the drug journals—the BULLETIN OF PHARMACY!

Brooklyn, N. Y. A. PATRICK SPERO, Ph.G.

THE SODA FOUNTAIN.

PRIZE SODA FORMULAS.

The Soda Fountain conducted a contest in which it offered prizes for the best soda beverages. The dispensers submitted their favorite recipes, with the full working process, explaining each step in detail, the method of manipulation, and giving a descriptive name for each beverage. The following dish was awarded first prize of $5.00:

TURKISH-ITALIAN SUNDAE.

On a fancy china plate place two 16-to-the-quart disherfuls of ice cream, one of chocolate to represent Italy and the other of peach to represent Turkey. Over the chocolate ice cream pour a ladleful of crushed bananas and a like amount of prepared figs over the peach ice cream. Around the base of the chocolate ice cream place halves or quarters of Italian cream chocolates; in the same way arrange around the peach ice cream similar sized pieces of Turkish paste. On the top of the ice cream representing the Turks place a large red cherry to simulate the fez or red felt or cloth cap worn by the Turks; in a similar manner place on top of the chocolate ice cream a small cube of orange to mark the Italians. On the dish between the two cones of ice cream put a spoonful of whipped cream colored with caramel to represent the war cloud hanging over the two countries. Sells for 20 cents.

This formula is not only timely, but it is attractive to both the eye and the taste. Why not feature it?

The following dishes were awarded lesser prizes:

CHARLOTTE RUSSE NUTAE.

Sweet cream, 20 per cent, 1 quart; powdered sugar, 6 ounces; extract of vanilla, 2 fluidrachms; ice cream powder, 2 teaspoonfuls; chopped nuts (very fine), 6 ounces. Mix by whipping the cream until almost stiff with the sugar, ice cream powder and extract; then add the chopped nuts and whip until the mixture will stand. Having previously made ready 1 dozen ice-cream saucers, take 24 lady-fingers, slice them into halves and place four of the halves around on each saucer and fill the center with charlotte russe. Then take a small quantity of whipped cream, colored a light red or pink, and decorate the dish, topping off with a maraschino cherry. Sell this for 15 cents. It yields a nice profit.

METROPOLITAN DESSERT.

Into a tall sherbet glass put in the order named 1 ounce of maple syrup, a ladleful of whipped cream and a No. 16-to-the-quart scoopful of vanilla ice cream. Over the ice cream place a ladleful of crushed pecan nuts and top with whipped cream and a maraschino cherry. On one side of the dish put a Nabisco or brandywine wafer.

TRIPLE-FRUIT SUNDAE.

Into a sundae glass put a No. 16 disherful of ice cream, pour over it a ladleful of crushed pineapples, then hollow out a No. 6 cone of ice cream and place it on top of the ice cream first put on the dish. Cover this with crushed strawberry and decorate with maraschino cherries.

This makes a desirable and showy sundae and can be made from the material or supplies on hand at any fountain, large or small.

SOME VERY PRETTY DISHES.

J. B. Clark, writing in *The Liquid Dispenser*, suggests several recipes for soda beverages. They are new, extremely tempting, and make a hit. Druggists will have no trouble in getting the prices given or even a nickel more, says Mr. Clark.

CUBA PARFAIT.

Use an 8-ounce concave glass for best results. Start by putting a layer of pineapple cubes in the bottom of the glass, then one small disher strawberry ice cream; flatten this even with a spoon; now place a layer of sliced peaches on this; again one small disher of vanilla ice cream; now sprinkle some whole pecans on top and dress with a dash of whipped cream and cherry. Charge 15 or 20 cents.

ANGEL PARFAIT.

Start in the same way; use first one layer of strawberry; one small disher of vanilla ice cream, flatten; one layer of crushed orange; one small disher of New York or vanilla; sprinkle ground nuts on top; dress with whipped cream and serve. Charge 15 or 20 cents.

DUCHESS SUNDAE.

Use a fancy plate for serving. Place on plate slices of pineapple; on top of this one disher of vanilla ice cream and flatten so that the top will be smooth; cut slices of bananas and place them around top edge of the cream; dress with whipped cream in center and a cherry or strawberry. Sell for 15 cents. It is a winner.

SNOWMAN SUNDAE (NOVELTY).

Use a small plate for serving. Place on the plate one slice of pineapple; then one disher of vanilla ice cream, well rounded for body; now one small disher of lemon ice; place a toothpick to hold the head and body; now comes the arms from two long-shaped marshmallows, stuck on toothpicks and inserted on each side; use two whole red raspberries for the eyes and half of a cherry for nose and the other half for mouth. This is a scream and sells easily for 25 cents.

CRYSTAL NUT SUNDAE.

Use tulip-shaped sundae glass. One small disher vanilla ice cream, over this pour small amount of chocolate syrup, add another small disher of vanilla ice cream; over this put a ladle of fresh fruit salad and sprinkle with whole pecans. Dress with whipped cream in center and top with cherry. Sells for 15 cents.

CHICAGO SPECIAL.

Use champagne sundae glass. One twenty-to-quart disher vanilla ice cream; one twenty-to-quart disher strawberry ice cream; one twenty-to-quart disher orange ice. Over all place a ladle of fruit salad and

top with a dash of whipped cream and cherry. Sells for 15 or 20 cents.

NEAPOLITAN NUT SUNDAE.

Take your large disher and fill one-third full of vanilla ice cream, then one-third full of chocolate ice cream, one-third full of strawberry. Here you now have what is known as Neapolitan ice cream. Turn out in sundae glasses. Use any desired flavor, top with nuts and cream and cherry, and serve for 15 cents.

MUTT AND JEFF.

Slice one banana and lay it flat in a split-banana sundae dish. Set one disher chocolate cream at one end, and the same amount of vanilla ice cream at the opposite end. Cut another banana into two unequal lengths and place it upright in the cream. Top each with a dash of whipped cream. One fresh marshmallow is placed on top of each banana. Serve with a small slice of orange between the upright bananas and decorate the ice cream with a few whole cherries.

If desired, a loaf of sugar saturated with brandy or alcohol can be placed on each marshmallow and then lighted when about to serve.

This novelty must not sell for less than 25 cents.

AMERICAN BEAUTY.

Use tulip-shaped sundae glass. Place one large disher of strawberry and vanilla ice cream mixed in bottom of glass. Then place quartered banana strips on each side of the glass, coming to a point at the top. Use plenty of crushed cherries, and top with whipped cream and a whole cherry.

Put it on your menu for 20 or 25 cents.

THE FUNCTION OF THE SODA FOUNTAIN.

Not long ago the *Boston Medical and Surgical Journal* printed an editorial on the soda fountain which we are glad to reproduce. Our readers will find in it some unusually good text for a booklet devoted to the soda fountain:

"Few popular American inventions are more characteristic of the national genius than the soda fountain. It is practical, it is simple, and it serves a useful purpose. When hot weather comes, the normal physiologic instinct is to drink more freely than at other times. Water is, of course, the standard human beverage; but it is not always easy to get good water, and the human passion for variety craves something with a different flavor. This desire for a new taste was probably at the bottom of the earliest use of alcoholic liquors; the constitutional effects were a secondary affair. There are still those who seek to quench the increased thirst of hot weather with wine or beer. But if alcohol is a bad drink at all times, it is worse when the thermometer is highest. With their innate good-sense, therefore, the majority of the American people turned from the bar in quest of harmless and thirst-slaking drink, and the problem of their search was solved by the soda fountain.

"The soda fountain bubbles with the versatility of the American character. It contains many possibilities within its limited compass. Originally it was designed merely to dispense aerated water flavored with various fruit extracts. The effervescence and the flavor contributed the two essential elements of a refreshing drink. Gradually, however, new elements were added. The same American genius which had shown itself in the invention of the cocktail, found in the domain of temperance drinks a new field for ingenuity; new mixtures and combinations were devised, until now the nomenclature of the soda fountain is as complex as that of any science. In the first place, there still remains the fundamental category of plain sodas; then there are all these plus ice-cream or plus phosphates, or plus an egg or plus any two or three ingredients. The addition of the egg was an important step, for that introduced the element of nutrition. Many a hustling American business man, who would formerly have gulped a whisky raw, followed by a chaser, or would have gone empty, now drinks his egg phosphate, and returns to his business refreshed and to his home good tempered. The soda fountain has helped the morals and the health of the American people.

"There are numerous other mixtures with strange names and unfathomed composition—the sundaes and the fizzes and the freezes and so on. Most delectable perhaps is the lime freeze, made of lime-juice, mint, ice, and soda water, a perfect substitute for the pernicious and seductive mint-julep. It is in the preparation of these mixed drinks that one sees the soda fountain at its best. The decorative stand, the mysterious compartments—from which fluid flows on the pressure of a knob, as Faust's wine flowed from the table—the tinkle of glasses, the cool clink of ice, the fizz of the soda, have all the fascination of a fully equipped bar; and the attendant, in white duck coat and apron, tossing a dash of phosphate into your drink and then shaking the whole to a foaming mixure, assumes all the friendliness of the bartender without any of the latter's diabolic possibilities.

"The soda fountain has few objectionable qualities, and these are far outweighed by its merits. It is clean, it is wholesome, it is attractive. It combines cheapness and convenience with beauty in its ministration to human thirst. It is perennial, for it can dispense a whole new category of hot drinks in winter. It is a great civilizing agent, a triumphant manifestation of clear-headed, practical American genius."

"KOKO CREME"—A POPULAR SODA-FOUNTAIN SYRUP.

During an experience of twenty years operating a soda fountain in connection with a retail drug store in a small town, Charles R. Rhodes has tried numerous syrup formulas under fanciful names. But all have been discarded except one, Koko Creme, which has grown steadily in popular favor since its introduction eighteen years ago.

Believing that a flavor which has proved palatable to many of his patrons for such a long period might be profitably used by pharmacists in other localities, Mr. Rhodes submitted the formula at the last meeting of the Pennsylvania Pharmaceutical Association.

For a glass of soda water, mix a sufficient quantity,

about 1½ ounces of equal parts of chocolate and vanilla syrups, and add one-half ounce of pure cream.

In dispensing, be careful to have the flavoring ingredients thoroughly mixed with the carbonated water and serve with a foam.

The syrups are prepared as follows:

Chocolate—

Powdered chocolate	8 ounces.
Granulated sugar	8 pounds.
Shredded gelatin	½ ounce.
Water	5 pints.

Dissolve the gelatin in the water cold, heat to the boiling point, then add seven pounds of sugar and stir until dissolved.

To this solution add the powdered chocolate, which has been slightly triturated with the remainder of the sugar, boil for ten minutes, stirring constantly with a wooden spoon or paddle.

If necessary, add sufficient water previously boiled to make the finished product measure ten pints and then pass it thorugh a wire milk strainer. Chocolate syrup prepared by this process meets all the requirements for soda fountain use. It is smooth, of proper density, and will not readily ferment. It should be kept in tightly stoppered quart or half-gallon bottles and thoroughly shaken when dispensed.

The vanilla syrup is prepared by dissolving one-half ounce shredded gelatin in one-half gallon of water, cold. Heat to the boiling point, add seven pounds of granulated sugar, dissolve, add sufficient water to make one gallon and strain. When cold add four ounces of vanilla extract.

The chocolate and vanilla syrups thus prepared can be used when these flavors are called for separately and need only be mixed when koko creme is requested. The gelatin is an excellent foam producer, free from the objectionable properties of soap-bark preparations for similar use.

When these syrups are combined as directed to make koko creme, the result is a wholesome delicious beverage that tastes similar to the old time chocolate drop. The drink can be sold profitably at five cents a glass and will doubtless prove a winner at any soda fountain where it receives a fair trial.

SELECTED FORMULAS.

PEACH PUFF.

Into an attractive bonbon dish put a ladleful of crushed peaches. Fill in with half vanilla cream and half peach cream. Top with whipped cream, over which sprinkle some dry English walnuts. On the crest put two maraschino cherries.

CHOCOLODA.

Put into a 12-ounce mixing glass one-fourth full of cracked ice, 2 ounces of chocolate syrup and 1 ladleful of marshmallow dressing. Then fill the glass with good, rich milk, shake, strain into a 12-ounce glass and add one 20-to-the-quart disherful of ice cream (chocolate or vanilla) on top. Serve as an egg drink. Sells for 20 cents.

PINEAPPLE BLEND.

A contributor sends the following formula with the statement that during the winter she finds that soft drinks made without carbonated water sell the faster and are liked better by the people; mix well together and place on ice 1 ounce of pineapple extract, 1 ounce of orange, 1 ounce of tartaric acid solution (8 ounces of tartaric acid to 1 pint of water), 1 quart of simple syrup (10 pounds to 1 gallon of water), ¼ ounce of yellow color and 2 quarts of clear water. Serve in 8-ounce glasses. At 5 cents per glass it yields a good profit.

FROZEN ORANGE BASKETS.

Cut an orange into the shape of a basket with a handle. Cut out the inside of the orange, leaving a little of the juice. Then fill the basket with ice cream and top off with a cherry, or two. The baskets can be made and frozen as wanted, or they may be made to order; they should not be frozen too hard. Slice off a little from the bottom so that the basket will stand upright.

FRUITADE.

Squeeze the juice of half an orange into a mixing glass and add 1 ounce of orange syrup, 1 ounce of cherry syrup, cracked ice, and a dash of solution of acid phosphate. Fill the glass with carbonated water, mix well and strain into a 10-ounce glass; top off with cracked ice and a maraschino cherry. Sells for 5 cents. Instead of using cracked ice and cherry syrup one can employ one 16-to-the-quart dipperful of orange ice on top and dispense the mixture as "orange float."

SWEET ENJOYMENT.

To one pint of pineapple syrup, add eight ounces of vanilla syrup, eight ounces of raspberry syrup, and twelve ounces of strawberry syrup, and mix thoroughly. To serve, draw one and one-half ounces into a twelve-ounce glass, add one ounce of sweet cream, and fill with carbonated water.

BANANA CREAM SHAKE.

Into a mixing glass draw one and one-half ounces of fresh banana syrup (simple syrup or peach syrup may be used), into this slice one-half a banana in very thin slices. Add a portion of ice cream and fill with milk and shake. Pour without straining into a twelve-ounce glass and serve with a spoon. This may be topped with whipped cream.

A BRIEF SODA AD.

"Sherwood's Drug Bulletin," a store paper published in Cleveland, had a little announcement of its soda fountain that invited patronage. It reads as follows:

> **The Soda Fountain.**
>
> The Soda Fountain continues to sizzle as if it were mid-summer. The appetizing morsels and toothsome dainties as prepared by our skilled dispensers are much appreciated, as evidenced by the increased patronage we are enjoying.
>
> The Nutritious Malted Egg Drinks as we prepare them are steadily growing in popularity. Healthful and appetizing as they are, there is little wonder. All our syrups are made from pure granulated sugar and flavored with crushed fruit. They are pure and wholesome. Every drop of our soda water is filtered—you can drink it freely because it's clean.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

This Helped the Prescription Department.—

Schlintz Bros., of Appleton, Wis., recently arranged a display of drugs and chemicals in the window. It did

more to develop the business of the prescription department than any other plan they ever tried.

On the left was a sign:

> YOUR DOCTOR KNOWS
> Your individual requirements. Bring his prescription here. It will be filled right.

Another sign on the right read:

> MEDICINES
> No medicine can be good unless the ingredients are of full strength. That's the kind you get here.

In the center of the trim was an assortment of chemicals and a few samples of drugs. A scale, a graduate, mortar and pestle completed a display of a strictly pharmaceutical nature.

An Excellent Prescription Ad.—

We are reproducing herewith an excellent enclosure for prescriptions. It is used by Messrs. Wilkinson & Co., prescription druggists, of Keokuk, Ia. No discussion is necessary. The enclosure is 3½ by 4 inches in dimensions and must impress the recipient with the care with which the prescription has been compounded.

Dear Friend:

To be chosen to compound your prescription—to be shown in this way of your respect and regard for our professional ability—appeals to us.

In the careful way we have compounded this prescription we have endeavored to convey back to you our thanks for your confidence.

We have used the very purest drugs and followed every detail of the order implicitly.

Should our efforts be of service in helping you back to health we shall deem ourselves doubly fortunate.

Yours very truly,
WILKINSON & CO.
Prescription Druggists.

422 Main Street,
Keokuk, Iowa.

An Unusual Store Paper.—

A somewhat novel store paper is distributed by the Key West Drug Co., of Key West, Florida. It is entitled the "Key West Booster," and is printed partly in English and partly in Spanish. Aside from several articles of local interest are a liberal supply of jokes. We reproduce one of the ads:

KEY WEST DRUG CO.

DRUGS--That's our business--You can accuse us of "Tooting our own horn" if you want to but we are proud of the record we have made in this line of business.

Since the organization of this business 9 years ago it has been the sole intention of the management to give to Key West a store second to none in the state. No stone has been left unturned. No expense has been spared to carry out these intentions, and today we are operating two stores, and they are both winners, because we stuck to the drug business--we are not through yet.

Some "Knocker" may say we are "Greedy" if we ask for more business, but we ask YOU for YOUR business. Operating the class of stores we do we feel entitled to portion of your business and we don't hesitate to ask for it.

If it's in the DRUG line—we have it.

Two Stores-Both Good **Two Phones-Both Working**

KEY WEST DRUG CO.

THE REXALL STORES.

Phones 40 and 49. Stores, Simonton and Fleming, and 123 Duval Sts.

A whole page was devoted to this appeal for business.

Politics in Pharmacy.—

Politicians have given A. J. Strathie of Doylestown, Pa., a cue for a very readable ad. It occupies only about two inches in the newspaper, but has attracted no little attention. It seems Mr. Strathie hit upon the idea one day while talking politics with a lawyer in his town.

We believe in
"INITIATIVE"
"REFERENDUM"
and "RECALL"

You take the **"INITIATIVE"** and visit our store and we will do our utmost to give you satisfaction.

We **"REFER"** our goods to you for your approval.

All your **CALLS** at our store are subject to **"RE-CALL."**

Summed up—

"It's a pleasure for us to please you."

HULSHIZER'S PHARMACY,

Main and State Sts., - Doylestown, Pa.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

The Unseen and Unknown.—

D. Berthelot says there are four classes of ultra-violet light-rays. The longest are those from the sun, which do not destroy germs directly but have a chemical action. Medium and extreme ultraviolet rays, which are produced by arc lamps, are germicidal and also induce chemical actions, and these two differ chiefly in the nature of the chemical changes which they induce. Finally there are "unknown" and very short rays which are so readily absorbed that they have escaped study thus far.

Tincture of Gentian.—

The natural emulsion of gentian root is stated by Bourquelot and Bridel to be insoluble in alcohol, yet to cause hydrolysis of the gentiopicrin by simple contact in 90-per-cent alcohol. The emulsion itself is soluble in 50-per-cent alcohol and in lower strengths, but its activity is not prevented by 90-per-cent alcohol, although it is insoluble therein. Hence a truly stable tincture of gentian, which contains the full amount of gentiopicrin, can only be obtained by treating the drug with boiling alcohol.

Results vs. Froth.—

German chemists have found that the best cleansing results from soaps come from a tallow soap. Next in order come soaps made with liquid vegetable oils, then come cocoanut and palm oil soaps, and last are rosin soaps. The strength of the soap solution has a great influence also, the best results being obtained with a solution containing from 0.2 to 0.4 per cent of soap.

The Measure of a Poison.—

J. Traube says that poisons change the surface tension of colloidal solutions very markedly, and argues that because of such changes, which in turn induce other changes, the action of poisons is physical and not chemical, and that the greater the change of physical condition which the poison produces, the greater is its toxicity. For instance, corrosive sublimate shows a change in surface tension in 1 part in 3,000,000, while potassium iodide shows it in 1 part in 400,000.

THE AUGUST MEETING OF THE A. PH. A.—Denver is to be the place, and the convention promises to be one of unusual interest. Among other things a trip will be arranged to the "Summit of the Continental Divide," the highest point reached by a standard gauge railroad in America. The train is here shown with some of the passengers looking at the ice-covered peaks all about them.

THE AUGUST MEETING OF THE A. PH. A.—Here we have a view of "Yankee Doodle Lake," which is to be seen on the railroad trip mentioned in connection with the other cut on this page. The water is of unfathomed depth, emerald-green in color, and 10,000 feet above the sea level. All about it is a vesture of beautiful snow even in the warm summer weather.

Rational Therapeutics.—

The condition of the body materially modifies the action of drugs, according to W. Salant. Starvation increases the toxic action of cocaine, strychnine, and phenol, but decreases that of phosphorus. Alcoholism makes the body more susceptible to atropine and lead, and decreases the elimination of caffeine. Fatigue often increases the susceptibility to poisons, and fevers modify the action of drugs, perhaps through the increased temperature. Hence the action of a drug in health only suggests what its action in disease may be.

Another Theory Knocked.—

Two German chemists claim that in chemical reactions of the metals there are split off negatively-charged electrons, which in many cases escape and contradict the theory of the indestructibility of matter. In such case stoichiometrical calculations are not accurate, since fragments of atoms escape and are lost.

How to Walk.—

J. Amar says that the consumption of oxygen in excess of that in quiet represents the energy required in walking, and from this he figures that the most economical expenditure of energy occurs when a man walks at the rate of about three miles per hour, and takes 80 to 150 steps per minute.

Electromulsions.—

A German chemist says that oil emulsions owe their stability, in part at least, to electrical repulsion of the minute oil particles which prevents their coalescing. The addition of an electrolyte, or the passing through the emulsion of a current of electricity, neutralizes this repulsive action and destroys the emulsion.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Nickel-plating Brass Lamps.

E. B. K. wants to know the process for nickel-plating the brass trimmings and lamps on automobiles permanently.

Brass or copper is sometimes brightened before entering to the plating bath by dipping it momentarily in nitric acid diluted with about 20 parts of water, and quickly rinsing it in running water. It should be placed in circuit immediately after this.

The hand must not come into contact with any part of the work after removal from the alkali, as the slightest touch may spoil all.

On removal of the plated work from the plating bath it should be quickly rinsed, without handling, in cold water, then transferred to hot water, which will cause it when taken out to dry quickly and perfectly. If the finished work is to present a smooth polishing surface, it must present such a surface before entering the plating bath. Nickel is hard and will not readily submit to a burnishing tool.

When the work is placed in circuit in the plating bath (and it should not be permitted to remain many moments in the bath without being placed in circuit) it should be moved about to free it from bubbles.

The process of nickel-plating is a simple one, and by a little practice and proper attention to the requirements, the bath may be worked month after month, and the metal deposited smoothly and with certainty.

FORMULA.

Double sulphate of nickel and ammonium	5 to 8 parts.
Water	100 parts.

Dissolve the nickel double salt in above quantity of water with the aid of heat. Cautiously add ammonia or the ammonium sulphate, until the solution is neutral to test paper. This solution should be maintained as nearly neutral as possible in use. This is commonly known in the United States as the Adams solution. It is in very general use by nickel-platers throughout the United States, and yields, where properly managed, excellent results.

For a description of the battery used and for several other processes, consult the *Scientific American Cyclopedia*, published by Munn & Co., New York.

A Percentage Problem.

B. P. submits the following queries: "How much iodine is there in one grain of potassium iodide; also in one drachm of syrup of ferrous iodide?"

According to the Pharmacopœia the molecular weight of potassium iodide equals 164.76, obtained by adding the atomic weight of potassium, 38.86, to that of iodine, 125.9. Since one atom of potassium unites with one atom of iodine to make a molecule of potassium iodide, it follows that the iodine content of this salt is 125.9 divided by 164.76. This fraction of a grain represents the amount of iodine in one grain of potassium iodide.

In the second problem we proceed as we did in the first, dividing in this instance twice the atomic weight of iodine by the molecular weight of ferrous iodide and multiplying the result by the number of grains of ferrous iodide in one drachm of the syrup. The molecular weight of FeI_2 equals 307.3, obtained by adding together 55.5, the atomic weight of iron, and 251.8, twice the atomic weight of iodine.

The specific gravity of syrup of ferrous iodide is 1.349. This multiplied by 56 gives 75.544 grains. Since the syrupy liquid contains about 5 per cent by weight of ferrous iodide we multiply 75.544 by .05 and obtain 3.7772, which multiplied by the fraction (251.8 divided by 307.3) equals 3.905 grains, the answer.

Wart Paint.

E. L. writes: "You will do me a great favor by sending formulas for a colorless wart remover. I have a few myself, but it occurs to me that you may know some well-tried recipes. Do you think I could improve upon a 50-per-cent solution of acetic acid with a small percentage of formaldehyde? Is there anything that could be used to disguise the odor of the acid?"

The following formulas are borrowed from a very reliable work, but it is a question whether they are colorless:

(1)	Carbolic acid	1 drachm.
	Glacial acetic acid	8 drachms.
(2)	Chloral hydrate	1 ounce.
	Glacial acetic acid	1 ounce.
	Salicylic acid	4 ounces.
	Alcohol	4 ounces.
	Flexible collodion	8 ounces.

The *Pharmaceutical Era* recently published the following formulas for a wart paint and a wart remover respectively:

(1)	Resorcin	150 grains.
	Salicylic acid	150 grains.
	Lactic acid	150 grains.
	Flexible collodion	900 grains.
	Ether	800 grains.
(2)	Compound tincture of lavender	2 fluidrachms.
	Glacial acetic acid, enough to make	4 fluidounces.

It would be hard to tell whether these preparations are better than a 50-per-cent solution of acetic acid with a small amount of formaldehyde, without actually trying them on the warts. As for disguising the odor of acetic acid, oil of lavender may prove satisfactory.

Casein Massage Cream.

G. P.—According to the *American Druggist* the following is an excellent formula for massage cream:

Casein, freshly precipitated	8 ounces.
Boric acid	4 drachms.
Cacao butter	8 drachms.
Oil of muguet	10 drops.

Mix the boric acid with the casein, add the cacao butter previously softened by warming, and incorporate the materials by trituration into a smooth cream, adding the perfume last.

Oil of muguet is the commercial name for synthetic "oil of lilac;" it gives a very fragrant and delicate odor to toilet creams. Positive directions for success-

fully making a casein massage cream can hardly be given, for much depends upon the casein itself, the amount of water it may contain, and the skill of the operator. However, the above formula may be used as a basis for experimentation, modifying it by the substitution of a small amount of lanolin for an equal amount of cacao butter and adding a few drops of a solution of carmine if a flesh tint is desired. If the dried casein of commerce is used this should be softened by warming it with sufficient water, to which a little glycerin may be added. The addition of a small amount of borax also aids in softening dry casein.

For other formulas, consult the annual indexes in the December issues of the BULLETIN.

Flexible Varnish.

C. J. H. wants help. He says: "I am after a pliable varnish, something that is not affected by alcohol or water and dries quickly. I have tried to make all kinds of solutions of gutta-percha and caoutchouc, using everything possible in the way of solvents, with unsatisfactory results."

Here are several formulas for flexible varnish taken from the literature. Be careful in handling inflammable solvents.

1. India-rubber cut small, 1½ ounces; 20 fluidounces chloroform, ether, or carbon bisulphide. Digest without heat until the solution is complete.
2. This is of the same composition as the foregoing. Only substitute gutta-percha for india-rubber.
3. Linseed oil, 1 gallon; 8 ounces each crude zinc sulphate and lead acetate; 8 ounces litharge. Boil with constant agitation until it strings well, then cool slowly and decant the cool portion. If too thick, thin with quick-drying linseed oil. Use great caution in preparing all varnishes which require the use of such inflammable materials as carbon bisulphide.
4. Pure india-rubber in shavings, 1 ounce; mineral naphtha, 2 pounds. Digest at a gentle heat in a close vessel till dissolved, and strain.
5. India-rubber, 1 ounce; drying oil, 1 quart; dissolve by little heat as possible, employing constant stirring, then strain.
6. Linseed oil, 1 gallon; dried white copperas and sugar of lead, of each 8 ounces; litharge, 8 ounces. Boil with constant agitation till it strings well, then cool slowly and decant the clear. If too thick, thin it with quick-drying linseed oil. These varnishes are used for balloons, gas-bags, etc.

Iodo-tannic Acid.

N. Z. writes: Can the following prescription be dispensed as a clear solution containing the iodine equivalent of 2 grains in each fluidrachm? If not, what addition is required? As the formula stands I can only get a dark-colored solution containing free iodine and am unable to get any chemical reaction between the two ingredients. The formula reads:

Iodine	37½ grains.
Tannic acid	60 grains.
Alcohol	1 fluidounce.
Syrup enough to make	8 ounces.

Heat the iodine and the acid with the alcohol and 1½ ounces of syrup below boiling point for about twenty minutes, or until free iodine is no longer given off. Then add the remainder of the syrup and flavor as desired.

This preparation is similar to iodo-tannic acid of the French Codex. Suppose you consult that French work. In the French preparation as given in the Codex, there is twice as much tannic acid as iodine. This leads us to believe that you should use 15 grains more of tannic acid. The French authorities, by the way, do not boil the mixture but digest it at 60° centigrade, agitating from time to time.

To Protect Trees from Climbing Insects.

A. R.—Any combination of cheap greases with tar, pitch, rosin or ozokerite, which will remain sticky when cold, and not melt too easily, may be smeared around

A DRUG STORE UNDER WATER.—During the recent floods in the South, the town of Hickman, Ky., was especially unfortunate, as readers of the newspapers will recall. We are presenting a picture of the store of the Hickman Drug Co., taken at a time when the main floor was 18 inches under water. Incidentally it is interesting to know that this is the very store which Mark Twain told about in his "Life on the Mississippi." The motor boat outside of the door apparently shows how customers reached the store during the flood.

the trunks of trees to prevent insects from crawling up them. The following combinations are suggestive, and may be modified to suit. Any combination which is soft or sticky at 40°, and will not run at 130°, can be used:

1.—Pitch, 12 parts; rosin, 10 parts; rosin oil, 2 parts.

2.—Tallow, 7 parts; palm oil, 5 parts.

3.—Ozokerite, 15 parts; petroleum, 3 to 6 parts.

4.—Rosin, 4 parts; linseed oil, 1 part; molasses, 1 part. Boil together.

5.—Rosin, 12 parts; rosin oil, 12 parts; soda lye, 1 part. Boil together.

6.—Tar, 10 parts; rosin, 5 parts; palm oil, 8 parts.

A Paint for Oilcloth.

H. L. S. writes: "Could you tell me of a paint that can be used for lettering on white oilcloth? I want the following colors: brown, yellow, cardinal, red, black, and white. It must not come off when cleaned with a wet rag."

Go to a paint shop and obtain any kind of tint or color as long as it is cut in Japan. If a gloss is desired, varnish after the paint has dried. On linoleum, the paint will probably be flat. But this defect can be corrected by applying a floor varnish of good quality.

Strontium Citrate Precipitated.

W. P. M. received a prescription:

Strontium bromide .....1 ounce.
Potassium citrate .....2 drachms.
Chloral hydrate .....2 drachms.
Peppermint water, q. s. ad.....4 ounces.

"Upon compounding this prescription, a thick white precipitate formed," adds our querist, "which I cannot account for. I had difficulty in filling the bottle, as the mixture would hardly flow. Kindly criticize the prescription."

We have commented on mixtures of this character before in our department of "Queries." The trouble is due to the formation of strontium citrate which is thrown down as a precipitate.

Fly-bane for Cattle.

H. L. M. wants a formula for a fly-chaser to be sprayed on horses and cattle during the warm weather. One of our correspondents has found the following formula an excellent one to keep flies off cattle:

Oil of pennyroyal.....4 drachms.
Oil of lavender.....2 drachms.
Carbolic acid .....1 drachm.
Fish oil enough to make.....1 pint.

A spray of one-per-cent solution of compound cresol solution U. S. P. should also be efficient.

An Incompatible Prescription.

U. D. Co. submits the following prescription:

Sodium salicylate .....3 drachms.
Quinine sulphate .....1 drachm.
Sulphuric acid (dil.).....2 drachms.
Simple elixir, enough to make....3 fluidounces.

Mix and make solution.

Our correspondent wants to know how this prescription should be filled to make a clear solution.

Soluble salicylates with solutions of quinine sulphate give a white, curdy precipitate of quinine salicylate which is nearly insoluble in water. Sodium salicylate with a dilute solution (1:1000) of quinine sulphate gives a crystalline precipitate in a few days. Suppose you consult the doctor who wrote this prescription. Induce him to leave out the sulphuric acid and replace the quinine sulphate with quinine hydrochloride. This will probably yield a clear solution.

Paste Dressing for Russet Shoes.

C. M. W.—We do not know the composition of the proprietary tan shoe polish which you mention. The paste dressings used on russet leather consist of mixtures of wax with oil and other vehicles which give a mixture of proper working quality.

A simple formula is:

Yellow wax.....9 parts.
Oil of turpentine.....20 parts.
Soap .....1 part.
Boiling water.....20 parts.

Dissolve the wax in the turpentine on a water-bath and the soap in the water, and stir the two liquids together until the mixture becomes sufficiently cold to remain homogeneous.

Another dressing for tan shoes consists of:

Beeswax .....1 part.
Oil of turpentine.....4 parts.

Spray for Catarrh.

C. E. W. wants a catarrh spray containing carbolic acid.

The following formula is found in the literature:

Carbolic acid .....10 minims.
Glycerin .....2 drachms.
Vaselin .....2 ounces.

Warm, and use as a spray every four hours.

A Film Cement.

Ironton.—The following formula for film cement was given us by an experienced photographer:

Ether .....2 ounces.
Acetone .....4 ounces.

Take a strip of non-inflammable film about 8 inches long, cut it up into small pieces, and dissolve them in the solution.

This, we are told, is a very good cement for the reason that it works quickly.

To Frost Windows.

B. J. O. writes: "Please publish a formula for frosting windows with Epsom salts."

A process is given in "350 Dollar Ideas for Druggists," on page 175. Moisten the glass with a sponge dipped in a saturated solution of Epsom salt in stale beer, and allow it to dry in the air.

To Polish Celluloid.

P. B. D. wants a formula of a polish for celluloid.

Make a kind of putty of hot soap, free from rosin, in which equal parts of fine pumice stone and flour emery have been mixed.

M. E. B.—We do not know a formula for the proprietary mixture which you describe.

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THE MONTH'S HISTORY

THE RICHARDSON AND OTHER BILLS.

Nobody knows yet what Congress may do at this session with reference to the Richardson bill and the half dozen or so other measures designed to amend the food and drugs act in different ways. A series of hearings on these different bills was held some time ago by the House Committee on Interstate Commerce, and the different branches of and associations in the drug trade were represented. The Legislative Committees of the N. A. R. D. and the A. Ph. A. had a conference in Washington at the time, and agreement was reached upon certain modifications of the Richardson measure. One or two representatives of the jobbing trade were also present, but they were not in accord with some of the positions taken and apparently did not vote.

The N. A. R. D. and A. Ph. A. Committees were afterwards represented at the hearing by Frank H. Freericks, attorney for the N. A. R. D. The position of the jobbing trade was set forth by F. E. Holliday. Charles M. Woodruff, in his capacity as secretary, spoke for the newly-organized Association of Manufacturers of Medicinal Products. The Proprietary Association was represented by Harry B. Thompson and George L. Douglas. Dr. Lyman F. Kebler spoke at some length and it turned out that he was the real author of the Richardson bill as it was at first drawn up. At the first day's hearing he submitted a number of further changes in the draft, among which was one striking out the so-called variation clause. Dr. H. W. Wiley and other individuals were also heard.

Hundreds of sheets of typewritten notes, and pages upon pages in different journals, have since been required to set forth what all these men had to say. They were not at all in agreement with one another, and in the last analysis it will be left for the House Committee to arrive at its own conclusions. The chairman of the committee, Congressman Adamson, is understood to be against the passage of any food and drug legislation at this session of Congress, and it looks more and more as if nothing would be done until the next session. If any amending bill be passed, however, it will probably not be the Richardson measure at all, but the Sherley bill. The latter is very brief, simple, and direct, and merely provides that a drug shall be deemed to be misbranded "if the package or label should bear any statement regarding the curative or therapeutic effect of such drug that is false and fraudulent."

This was the original purpose of the Richardson bill, but the framers evidently thought that while they were about it they might as well do a lot of other things, and they loaded up the measure with so much stuff that no two people have been able to agree on it.

THE "VARIATION CLAUSE" AGAIN.

All this agitation for the amendment of the food and drugs act, it will be remembered, was provoked by the decision in the now famous Johnson cancer cure case. The court held against the government and with the defense that curative claims, whether exaggerated or not, were not reached by the food and drugs act, and since then there has been a very general desire so to amend the act if possible that the omission will be corrected. President Taft sent a short message to Congress pointing out the desirability of action, and the Sherley bill, the Richardson bill, and half a dozen other measures are the result. The Sherley bill hits the nail squarely on the head and will do all that can possibly be done. Congressional sentiment seems to be crystallizing in its favor. The Richardson bill drags in a lot of extraneous issues upon which there is no agreement as yet, and we shall be very much surprised if it is adopted by Congress.

Take, for instance, all the discussion about the variation clause. This received perhaps more attention at the recent congressional hearings than any other feature of the Richardson bill. Dr. Kebler started it all by urging at the hearing on the first day that the variation clause contained in the Richardson bill as it was introduced into Congress be stricken out. Subsequently the N. A. R. D. and A. Ph. A. Committees, in their conference in Washington, voted in favor of supporting Dr. Kebler on this proposition, and Mr. Freericks accordingly urged before the House Committee that the clause be dropped and that the "single standard" for U. S. P. and N. F. products be observed.

We expressed our opinion about this question editorially last month, and we do not need to go all over the ground again. The variation clause has always been contained in the food and drugs act, and it is now proposed by Kebler, Freericks and others to drop it. What will happen if it is dropped? Simply this—there can be no possible improvement in U. S. P. and N. F. products for ten years or more until new editions of these books are published! Everybody will have to travel in the same old rut, use the same old method, and hold back all progress until the word comes to go ahead! Furthermore, there are many able lawyers who declare that if the variation clause of the food and drugs act is stricken out the law will be rendered unconstitutional. Why? Because you can interfere with the freedom of trade, and the rights of individuals, just so far and no farther. A man must be permitted to buy what he wants to buy, and to make and sell what he wants to make and sell, unless, of course, he is interfering with the public health or the public welfare or the rights of other individuals.

* * *

GOVERNMENT CONFISCATION.

Another strong argument against the abandonment of the variation clause was made by Mr. Holliday at the recent hearings. He spoke of a certain proprietary essence of pepsin. This product had become very popular and well known before a formula for a similar preparation appeared in the N. F. The N. F. publishers printed a competing formula and borrowed the title which the manufacturer had always used, namely, "Essence of Pepsin." Now suppose Congress ties things up so that there can be no variation in N. F. products, and no preparation can therefore be sold under the title of "Essence of Pepsin" unless it is made absolutely after the N. F. formula and process. The original manufacturer, then, will either have to abandon the process which he has always used, and on which he has built up his reputation, or else he will have to call his preparation by some other name. In other words, either his process or his title will be taken away from him. That which he has built up the government has therefore robbed him of. This is plain confiscation, isn't it—taking a man's property away from him without due process of law? Does anybody argue that a statute which permits this sort of thing is constitutional?

This point has come up in one way and another on several occasions since the passage of the food and drugs act. There are dozens of products in the National Formulary which are in exactly the same category, and there are perhaps a few in the Pharmacopœia as well. If therefore the variation clause is abandoned, and manufacturers of the original products are accordingly made either to change their titles or to conform to the official formula, an injury will be done to them which may be corrected by an appeal to the courts. We shall certainly have a nice mess!

A NEEDED REFORM.

Mr. Miers Busch, of the well-known jobbing house of Shoemaker & Busch in Philadelphia, has been for some time carrying on a propaganda to induce the newspapers of the country to cut out all reference to specific poisons and their doses in publishing reports of suicides. Last October, for instance, the National Wholesale Druggists' Association passed the following resolution and recommended it for adoption by associations generally:

Whereas, the publication by the daily newspapers of the names of the poisons used in cases of suicide or homicide, together with information concerning such poisons and the amount constituting a fatal dose, has the tendency to suggest their use to criminals and persons of suicidal intent;

Therefore be it resolved, that we recommend that the members of the National Wholesale Druggists' Association request the proprietors of newspapers in their vicinity to omit in future the publication of these details.

Practically the same resolution has also been adopted by six or eight State pharmaceutical associations, a number of local bodies, and several medical societies. Mr. Busch has this year called upon every State pharmaceutical association in the country to take action if it has not already done so. In the meantime the newspapers of Mr. Busch's own city have promised to conform to his request, while Melville E. Stone, general manager of the Associated Press, has expressed himself in full sympathy with the idea and has said that he would do what he could to bring all of his thousands of correspondents into line.

The simple fact is, as everybody knows, that suicides are contagious. Let the newspapers publish stories to-day about some prominent suicide, and to-morrow there will be half a dozen other stories to report in different parts of the country. This is particularly true when the reports give the name of the poison used, and the dose employed. If these facts are omitted, most of the harm done by such publicity is avoided.

* * *

DR. WILEY'S SUCCESSOR.

Nothing has been done yet in the selection of a successor to Dr. H. W. Wiley. President Taft has been compelled to take the field in defense of his administration, and his time and his thought have been so wholly occupied that he has doubtless paid little attention to appointments. Nothing indeed may be done for some time, inasmuch as the work of the Bureau of Chemistry is apparently running along pretty well under the temporary direction of Dr. Doolittle. In the meantime, however, the drug trade is taking up the candidacy of Dr. James H. Beal with a great deal of enthusiasm. Resolutions in his favor have been adopted by a number of organizations like the Philadelphia Association of Retail Druggists, the Chicago Retail Druggists' Association, the Hyde Park druggists in Chicago, the Western Pennsylvania Retail Druggists' Association, the Pittsburg Branch of the A. Ph. A., the New York College of Pharmacy, and many others. The State associations will begin to hold their annual conventions before long, and they will doubtless fall in line with the general movement. Meanwhile a delegation of prominent members of the drug trade, especially from Dr. Beal's own State of Ohio, have called on President Taft in person to urge Dr. Beal's appointment. Dr. Beal himself, however, is not lifting a finger in his own behalf, and is leaving both the initiation and development of the movement entirely to his friends.

* * *

MONOHIPPIC DRUG JOURNALS.

Our friend Schneider, editor of the *Pacific Pharmacist* out in 'Frisco, is a warm and enthusiastic advocate of Dr. Wiley. He is a little bit peeved that some of the drug journals have on divers occasions attacked his champion, and he gives a list of these offenders in an editorial published in the April issue. Of course the BULLETIN OF PHARMACY is not in this list—that isn't the reason we are mentioning the circumstance. What interests just now is the term which Dr. Schneider applies to these papers who have offended against his sense of decency. He calls them "monohippic" journals. Pretty good word, isn't it? Monohippic! "Mono" is of course "one," but we do not suppose this word means one-hipped, or hip-sided, or lop-sided. Neither is it likely to mean that these journals are "hipped" on themselves. Confound it, what does the term mean anyway? We are curious to know what compliment is being paid to some of our editorial friends. Can it be that Dr. Schneider is a Greek scholar, and that he has coined a phrase meant to suggest that some of the drug papers are one-horse journals? With this fear

in mind, we resist the temptation to reprint his list of monohippic monstrosities.

* * *

DR. RUSBY CONTEMPLATING A CHANGE?

One of the interesting rumors of the day has it that Dr. H. H. Rusby will soon retire from some of his several positions in order to establish a pharmacognostical laboratory in connection with the business of Dr. George A. Ferguson. Dr. Ferguson was formerly a professor in the New York College of Pharmacy, and since retiring from the faculty has become an analytical and consulting chemist. It is supposed that Dr. Rusby will give up the deanship of the New York College, but will retain his position on the faculty. It is expected, too, that he will abandon his work as pharmacognosist for the government at the port of New York. He has several other irons in the fire also, and in fact is one of the busiest men it has ever been our fortune to know. His ability and his reputation are such that it would seem most wise for him to capitalize them in a private business of his own, and there is no doubt that such a change as he contemplates would greatly increase his income.

* * *

ADVERTISING A MEETING.

An ingenious advertising plan has been carried out this year in behalf of the annual meeting of the Tennessee Pharmaceutical Association. The convention is to be held in Chattanooga on July 9, 10, and 11. Chattanooga is a place of such remarkable historical interest that it lends itself very nicely to purposes of publicity. W. I. Gates, Chairman of the Publicity Committee, has taken a series of souvenir post-cards, bearing different Chattanooga views, historical and otherwise, and then printed on the front of them short announcements of the forthcoming meeting. The particular announcement on each card is different, and the "follow up" method has apparently been used in mailing the series. By the time a druggist has received the third or fourth card he has become pretty thoroughly interested in the meeting, and has developed a desire to see some of the places which have been brought to his attention. The scheme strikes us as a pretty good one and worthy of adoption by other associations.

THE SACCHARIN RULING.

There has been some misunderstanding among druggists regarding the Federal regulation against the use of saccharin in foods. Some druggists have worried lest certain medicinal preparations containing saccharin would be considered illegal. In aromatic preparations of castor oil, for instance, saccharin is quite frequently employed for the reason that sugar is not soluble, and druggists in some instances have shown alarm over the presence of saccharin in products of this character. Fears of this kind are all based upon a misapprehension. *The ruling in question affects foods only and has nothing whatever to do with medicines.* Furthermore, so far as foods are concerned, the ruling has recently been somewhat modified so that now saccharin may be used in foods for invalids or semi-invalids who are advised by their physicians not to use substances which contain sugar.

* * *

NEW BRANCH OF THE A. PH. A.

The latest branch of the American Pharmaceutical Association to be organized is that in St. Louis. William K. Ilhardt has been elected president, and the first regular meeting was held some time ago. On that occasion a number of interesting papers were presented, and a wide range of topics discussed. Medicinal plants, with particular reference to the Missouri Botanical Garden, occupied most of the space on the programme, but other subjects were taken up like the Richardson bill, the Pharmacopœia, board examinations, and the drug-clerk question. The Chicago branch of the A. Ph. A., by the way, has lately adopted the custom of inviting some man from outside the State to come to Chicago and deliver a special address. The first speaker in this series was John Uri Lloyd, who gave a most interesting talk concerning his travels in Eastern lands and the collection and shipment of such drugs as opium, licorice, myrrh, and the like.

* * *

CANADIAN DRUG REGULATIONS.

American manufacturers of proprietary medicines whose products are marketed in Canada should take cognizance of the new regulations recently promulgated by the Board of Inland Revenue of the Dominion. The Act provides that all patent and proprietary medicines intended for internal use in man, manu-

factured or imported into Canada for sale, shall be registered with the Department at Ottawa before April 1 each year, although all preparations for external use, provided they contain no cocaine, are exempt from registration. Among other things, the new regulations require that if any preparation contains drugs in excess of the dose required, the name of the drug must be printed on the label of each individual package containing it. The presence of oils of tansy, savin, pennyroyal, etc., ergot, and other abortifacients, when present, must also be declared on the label.

* * *

INDEMNITY INSURANCE.

Here's a strange development! We have been hearing for years that druggists in certain cities found it a wise bit of coöperation to have their associations buy indemnity insurance protecting the members against damage suits arising from mistakes in compounding and the like. Now comes along the insurance commissioner of the State of Missouri, who issues an order prohibiting the sale of indemnity insurance for druggists, doctors, dentists, and automobilists. Why? Because such insurance tends to make the insured careless. If he knows he is going to be protected anyway, he will not use that degree of caution which would otherwise be his guiding star. This is rather a fine point to take, but it would seem in the meantime as if indemnity insurance could not be purchased in the State of Missouri unless it is found that this particular commissioner, in placing the ban upon it, has exceeded his powers.

* * *

DRUGGISTS CONSOLIDATING.

It is rather interesting to know that the proprietors of three drug stores in Minneapolis have joined hands and formed "The Public Drug Co." with an authorized capital stock of $250,000. Stewart Gamble is president of the corporation, F. L. Dennie vice-president, C. B. McCall secretary, Alvah W. Ludwig director, and S. H. Brownlee treasurer and general manager. Mr. Gamble is well-known as the president of the State association two or three years ago. The three stores formerly owned by these men will be maintained, and a fourth establishment will be opened at 201 Washington Avenue South. The consolidation is made for the obvious purpose of eliminating waste and achieving economies. Doubtless other stores will be added if the conditions warrant such a step.

* * *

FRAUD HABIT CURES.

It has been discovered on more than one occasion that the products sold for the treatment of the narcotic habit themselves contain the very narcotics which they are supposed to combat! Here is a recent case in point: The "St. James Society" of New York City was prosecuted by the government for shipping what was called a "drug-habit cure." The ground of complaint was that the product was misbranded, but the interesting disclosure made by the prosecution was this, that the alleged drug-habit cure contained morphine to the extent of 3½ grains to the fluidounce!

* * *

Gustav Ramsperger, one of the original founders of the German Apothecaries' Association in New York, and a German-American of prominence, was instantly killed a few weeks ago by falling from the sixth floor window of his apartment in Central Park West. He was 88 years old.

* * *

The Water Bureau in Philadelphia has recently ruled that druggists having soda fountains must hereafter pay an extra tax of $5.00 annually, whether or not there is a separate connection between the fountains and the city mains. The P. A. R. D. is fighting the ruling.

* * *

The Senior class of the Brooklyn College of Pharmacy has presented the college with a memorial tablet of the late Dr. William Muir, one of the founders of the institution. The tablet is made of bronze with a background of marble.

* * *

The Milwaukee convention of the N. A. R. D. this year has been changed from the week of August 26 to the week of August 12, for the reason that some other large gathering is to be in Milwaukee during the last week of the month.

* * *

A successor to Dr. H. W. Wiley has just appeared on the scene, but he will not be able to qualify for some time. He was born on the 16th of last month—Dr. Wiley, Jr.

EDITORIAL

THE RELATION OF INSURANCE TO CREDIT.

For some time we have been trying to impress upon our readers the cardinal importance of a proper degree of insurance protection. We now find in a recent issue of the *Midland Druggist* a short but most illuminating article by George W. Lattimer, chairman of the Committee on Fire Insurance of the National Wholesale Druggists' Association, and a member of the jobbing firm of the Kauffman-Lattimer Co., of Columbus, Ohio. Mr. Lattimer especially discusses in this paper the relation of insurance to credit.

He shows, for instance, that the jobber or manufacturer, in extending credit to the retailer, finds it of the utmost importance that, in addition to the retailer's commercial rating, he discover what insurance protection the man has. For what avails it if the druggist is rated at $20,000, say, if all of this amount, as frequently happens, is invested in stock, fixtures and building, and if the whole sum is lost by a sudden fire with no insurance by way of reimbursement?

In order to show just what this means Mr. Lattimer quotes a credit man in one of the large wholesale houses in a leading city:

> Of the many property statements coming under my supervision, I feel safe in stating that there is not one in fifty which shows the trade carrying sufficient fire insurance. We attach so much importance to fire insurance that we have for some years past required our customers to whom we have extended credit to report on blanks which we furnish, the amount of insurance carried and the name of the company and date of expiration. We then follow up the expiration and see that the insurance is renewed.
>
> One of the heaviest losses sustained by us this year was the result of a customer burned out without insurance, and in looking back over our list for some years, I find that cases of this kind have been frequent.

Practically all business in the United States is done upon credit, and the accurate placing of a man's rating is one of the carefully studied commercial sciences of the day. That merchant is foolish who does not give the information requested by creditors or by commercial agencies, and who does not comply with all of the requirements of the situation. Insurance protection plays a large part in the problem of credit, and every merchant owes it to his creditors as well as to himself to see that he buys fire insurance of the proper kind and quantity. So important is this consideration that the National Credit Men's Association, during the last two or three years, has published no fewer than six booklets on the relation of insurance to credit. And yet every day merchants are being burned out with little or no insurance, thus subjecting themselves and all their creditors to losses for which there is no excuse at all.

PROGRESS IN VACCINE THERAPY.

We are living in an age of remarkable scientific discovery. Especially in the field of applied bacteriology, great strides are being made. Some medical men even predict that the time is not far distant when many of the suppurative conditions now treated surgically will be cured in other ways. There will be serums, vaccines, or related bodies which, introduced into the circulation, will prevent the growth of pathological organisms. Operators are already using vaccines for prophylactic purposes. The field of surgery, it appears, will dwindle. But that the technique will progress, we have no doubt.

In the treatment of infections, vaccines are already supplanting the knife. Take boils, for example. Slash them open, establish drainage was the usual advice not long ago. Now the physician withdraws the content, injects a little vaccine, and the boil is healed. There is no scar, and the patient has much less discomfort. So with catarrhal inflammations, the time is probably coming when surgical intervention will no longer be necessary. Biological products will be available either to immunize susceptible people against such infections or to cure them when they actually come down with disease.

Of late we have been watching with a great deal of interest the wonderful work of Dr. A. F. Schafer, of Bakersfield, California. Dr. Schafer is the discoverer of the Phylacogen treatment of germ diseases. Rheumatism of the joints, until recently a hopeless affection that resisted nearly all forms of medical treatment, is now being cured with half a dozen or more injections of the proper Phylacogen. Rheumatism Phylacogen is already on the market, and is soon to be followed by other Schafer products.

Among these Pneumonia Phylacogen is especially promising. Hitherto this dread disease has baffled physicians. The mortality

has been high—about 40 per cent. Beyond watching the heart and insuring proper nursing, there was little a physician could do. He undertook such cases with the same fear and trepidation that marked his visit to a diphtheric patient before the advent of antitoxin. Now he may call, give an injection or two of Pneumonia Phylacogen, and the patient begins to improve at once. In a few hours the feverish temperature subsides, the blood-pressure becomes normal, and the patient is on the road to recovery. Of course, he must have strength enough to tide him over the period of convalescence. But as for the disease itself, it is said to yield to Phylacogen in something like 80 per cent of the cases. Thus far the pneumonia product has been used experimentally only, but its early manufacture has been announced.

We might go on to write a book about the wonderful work of Dr. Schafer. There are so many diseases in which the Phylacogens are indicated. But we must hasten now to an explanation of the theory of the phylacogen action. It is Dr. Schafer's belief that most pathological affections are due not to the specific germ alone, but also to the action of other organisms that may be associated with it. Dr. Schafer has found further that every germ contains the elements of its own destruction. It contains products which, extracted or removed, may be used to prevent the growth of the very organisms from which they are derived. This is not exactly a new phenomenon. There has always been a kinship between the principle of *similia similibus curantur* and certain phases of immunity. Pharmacists are well aware that when a culture of acetic acid bacilli generates 12 per cent of acetic acid, the germs die, overcome by their own secretion. In a somewhat similar way Phylacogens are destructive to the very germs from which they come. The organisms of rheumatism, typhoid, pneumonia, mixed infections of various kinds, erysipelas, acne, and other diseases succumb to an injection of the proper Phylacogen, which is nothing more or less than the elements of the very germ bodies which they are intended to combat.

What a wonderful piece of work! Dr. Schafer's Phylacogens are not serums. Nor are they vaccines. In a sense they may be called modified vaccines, and at least for the present represent the last word in biological therapeutics.

BUSINESS CARELESSNESS.

It certainly is strange how indifferent some druggists are to the most fundamental necessities of business life. In talking with a large jobber some time ago we were astonished to find how frequently it was that druggists made no attempt, for instance, to secure a good credit rating. One case in point was mentioned where a man had been slow in his payments for ten years. He kept getting worse and worse, and more and more in arrears. He had no rating with either Bradstreet or Dun, and the jobber was afraid to grant him credit any longer. Letters calling attention to arrearages were ignored. Finally, after a great deal of pressure had been brought to bear, the man paid part of his account with a check, but the check was afterwards protested when presented for payment!

Here was a druggist whose financial obligations never caused him any anxiety, who never thought of the value of cash discounts that might be earned, who usually ignored letters calling attention to arrearages, who apparently paid his bills only when dunned time and time again, and with whom it was no crime at all to issue a check knowing full well that he had not enough money on deposit to meet it.

When he was taken to task about these shortcomings, he declared that he was out of town when the protested check arrived. This evidently seemed to him sufficient excuse. If he had been there he would have taken care of it! As for the absence of any rating with Bradstreet or Dun, he loftily asserted that he never bothered with letters of inquiry from these sources. He never troubled himself to make any statement to such concerns. He added, moreover, that credit rating was only a matter of favoritism, and that he knew personally a number of people who had good ratings but who were nothing but bluffs in fact.

What are you going to do with such men in business life? Our friend, the jobber, told us that there were a surprising number of such druggists with whom every jobber and manufacturing house have to deal. They seem to have had no commercial training whatever—to possess no ideas of commercial practices and precautions. They ignore their plain obligations, and then become offended if their creditors speak rather plain language to them.

THE HALL OF FAME

DR. SCHLOTTERBECK GOES TO ROCHESTER.

The alumni of the School of Pharmacy of the University of Michigan, and all of the other numerous friends of Dr. Schlotterbeck for that matter, have been very much interested in the announcement that he has been

DR. J. O. SCHLOTTERBECK.

granted a year's leave of absence by the University in order to establish a laboratory for the J. Hungerford Smith Co. of Rochester, N. Y. Mr. Smith himself is an alumnus of the school, as is his son also, and the Smiths evidently knew from personal experience that Dr. Schlotterbeck was admirably adapted to create a new laboratory of the kind needed, to equip it properly, to get a good working staff, and to lay out the work wisely and thoroughly. In the meantime Dr. Schlotterbeck's place as dean and professor will be filled by other members of the faculty and by assistants who have received their training under him.

The esteem in which Dr. Schlotterbeck is held by the alumni was exhibited on the evening of May 23, when a testimonial dinner was given him at the Hotel Cadillac in this city. There were present about forty former students of the school, and the occasion was one of unusual enthusiasm. Dr. Schlotterbeck's character and ability were eulogized by several speakers, and a handsome gold watch was presented to the guest of honor during the course of the evening.

A PROMINENT IOWA PHARMACIST.

Theodore W. Ruete, of Dubuque, Iowa, is a druggist who has frequently been honored by the people of his own city and by his fellow workers throughout the State. He has served, for instance, as president of the Iowa State Pharmaceutical Association. He was a member of the first A. Ph. A. Committee appointed to get out the National Formulary. In Dubuque he has been a prominent citizen, and at the present time is president of Finley Hospital. Mr. Ruete was born and received his educational training in Germany, which accounts for the thoroughness of his pharmaceutical equipment. Soon after arriving in this country the Civil War broke out, and he served as apothecary and hospital steward until peace was declared, witnessing during

T. W. RUETE.

this period many of the great battles fought by the Army of the Potomac. He has been in Dubuque for thirty-eight years and has always conducted a first-class business, in which particular attention has been paid to the prescription department.

MR. RYAN GIVEN AN HONORARY DEGREE.

At the annual commencement exercises of the Philadelphia College of Pharmacy last month Frank G. Ryan, President of Parke, Davis & Co., had conferred upon him the honorary degree of Master of Pharmacy (Ph.M.). This degree has been granted very

sparingly by the College, and has always been reserved for those who have really distinguished themselves in some branch of the call-

FRANK G. RYAN.

ing. It is a reward of unusual merit. Mr. Ryan is an alumnus of the College, and was for fourteen years a member of the faculty.

THE FRAILEY DYNASTY.

Everybody in N. A. R. D. and A. D. S. circles knows who William O. Frailey is, and no one need be told that he has two prosperous

THE THREE FRAILEYS

stores in Lancaster, Pa. We recently asked Mr. Frailey to send us a picture of his residence, and what he supplied instead was a photograph of his front porch. But since incidentally this shows three generations of the Frailey family we ought not to be disappointed. For here we have portraits of William O. Frailey, Sr., William O. Frailey, Jr., and William O. Frailey, 3d. William O., Jr., is manager of the branch store on East King Street, while Billy the Third will some day be manager of another branch. Thus the Frailey dynasty in the drug business promises to make history.

PHARMACIST AND MASON.

Frank Richardson, of Cambridge, N. Y., has been treasurer of the New York State Pharmaceutical Association now for eight or ten years, and seems to have a life tenure on the job. We doubt even if the adoption of T. R.'s recall methods would oust him from the

FRANK RICHARDSON.

place. This is what it means to give permanent satisfaction. Mr. Richardson was graduated from the Albany College of Pharmacy twenty years or more ago. He was high honor man, and for a reasonable period after that he was a member of the faculty. During this time he had a store in Albany, but later on he listened to the alluring call of the open, and so hied himself up to Cambridge, where there was more green grass and fresh air, and where the life of the retailer was somewhat less irksome. Incidentally Mr. Richardson is quite prominent in the Masonic fraternity, and he is now, among other things, president of the Past Masters' Association of the Twentieth Masonic District.

The home of Dr. James H. Beal, in Scio, Ohio, general secretary of the A. Ph. A. and editor of the official journal.

Residence of Henry P. Hynson, the well-known Baltimore pharmacist, in the beautiful suburban region known as Roland Park.

Frank Richardson, whose home this is in Cambridge, N. Y., has been treasurer for some years of the State Pharmaceutical Association.

Frank W. Bucknam, of Skowhegan, Maine, has been for some years a member of the State Board of Pharmacy.

George Reimann, the Buffalo pharmacist, has his residence at 12 Willow Lawn, with a garage in the rear.

Here we have Mr. and Mrs. Reimann in their Ford runabout, in front of the Reimann residence shown in the other picture.

Homes of Well-known Druggists.

E. E. Calkins, located in the University town of Ann Arbor, Michigan, was president last year of the State Pharmaceutical Association.

Here we have a view of the living room in the residence of J. J. Goodyear, who is next-door neighbor to Mr. Calkins in Ann Arbor.

William S. Elkin, Jr., of Atlanta, Ga., is well known as one of the ex-presidents of the National Association of Retail Druggists.

Here we have the comfortable, vine-clad, Southern residence of Prof. R. H. Needham, 1311 Harrington Ave., Fort Worth, Tex.

This cut shows an interior view of the home of George W. Parisen at 321 High Street, Perth Amboy, N. J.

Here we have the residence of M. Noll at 605 Atchison Street. Atchison, Kansas.

Homes of Well-known Druggists.

John W. Durr, the Durr Drug Co., Montgomery, Ala.

David M. Cowan, Plimpton, Cowan & Co., Buffalo, N. Y.

Theodore F. Meyer, Meyer Brothers Drug Co., St. Louis, Mo.

Lucien B. Hall, the Hall-Van Gorder Co., Cleveland, Ohio.

L. D. Sale, Western Wholesale Drug Co., Los Angeles, Cal.

Dr. William J. Schieffelin, Schieffelin & Co., New York City.

Charles F. Weller, Richardson Drug Co., Omaha, Neb.

B. C. Hartz, Hartz & Bahnsen Co., Rock Island, Ill.

Donald McKesson, McKesson & Robbins, New York City.

A page of Well-known Jobbers.

George H. White, Phar.D., Jersey City, N. J., president of the New Jersey Board.

Henry M. Faser, University, Miss., president of the Mississippi Board.

Arthur von Rohr, Winona, Minn., president of the Minnesota Board.

James H. Martin, Winchester, Ky., president of the Kentucky Board.

J. B. Michels, El Paso, Ill., president of the Illinois Board.

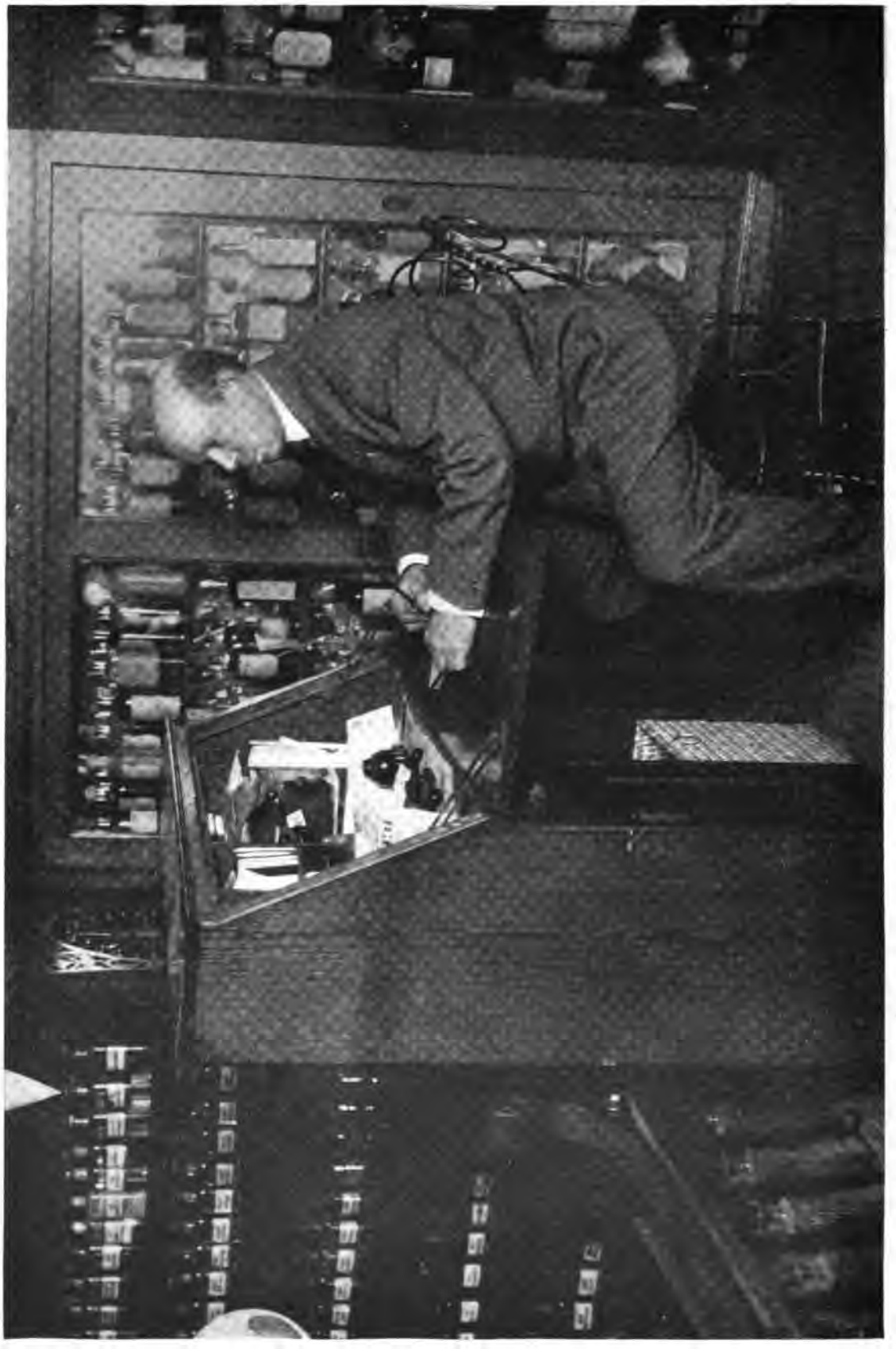
William C. Powell, Snow Hill, Md., president of the Maryland Board.

I. W. Clements, Marengo, Ia., president of the Iowa Board.

Byron M. Hyde, Rochester, N. Y., president of the New York Board.

Floyd W. Brown, Lead, S. D., president of the South Dakota Board.

Presidents of Some of the State Boards of Pharmacy.



[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

3. Joseph F. Forbrich, Chicago, Illinois.

The first three views on this page represent drug stores in East India. This particular one is the pharmacy of Dr. K. B. Patel in Quetta, Baluchistan.

Here we have a handsome building containing the up-to-date pharmacy of E. Speechley, in Karachi, India. Mr. Speechley evidently owns the entire structure.

We are now looking at a typical drug shop of the smaller towns in India. This one is located in the Punjab at Hyderabad.

Jumping now over into the Philippines, we show a typical "Botica," with some of the Filipino sports about the entrance.

We are now in Japan, and this pharmacy we find located about 100 miles from Tokio near the Asama Mountain. The manager is J. A. Fenner, a graduate of the School of Pharmacy of the University of Michigan.

Still in Japan, we have in the first store at the left an American pharmacy in the city of Tokio. This store is under the management of Mr. Fenner also. The street is a typical one in Tokio.

A page of Foreign Drug Stores.

Three Prize Hair-Tonic Formulas.

In awarding prizes in the recent contest conducted by the BULLETIN for best hair-tonic formulas, the Prize Committee feels it only fitting to explain why many of the products failed to receive favorable consideration. Several had too high a percentage of alcohol, making the mixture too expensive for general sale. Others were excellent dandruff removers but not hair tonics—that is to say, they contained antiseptics but not scalp stimulants. Still others included chloral, which is objectionable because it must be mentioned on the label to the uneasiness of the customer. A few had objectionable ingredients such as corrosive sublimate or lead acetate, chemicals to which some people are susceptible. The three prize-winning formulas we believe to be excellent, and we are giving honorable mention to several others.—THE COMMITTEE.

FIRST PRIZE FORMULA.

By DAISY A. FRICK, AUDUBON, IOWA.

RESOR-QUINOL HAIR TONIC.

I find that I am becoming enthusiastic over the hair-tonic proposition. The formula which I submit is my own and is actually resulting in

A 6-ounce package of "Resor-Quinol Hair Tonic"—the product winning the prize.

increased sales. I just had a "come-back" for $5.00 worth. I sell 6 bottles for $5.00. It is a repeater. Moreover, every time we sell a bottle of hair tonic, we recommend and almost invariably sell a shampoo bag at ten cents or three for a quarter. The customer is advised to keep the hair clean.

I submit a specimen package of our Tonic, and also one of our newspaper ads. The formula reads:

Quinine ..... ½ drachm.
Resorcin ..... 4 drachms.
Tincture of jaborandi..... 2 ounces.
Tincture of cantharides..... 4 drachms.

Have You Dandruff?

Does Your Hair Fall Out?

Do You Know What Resor-Quinol Hair Tonic Will Do?

FIRST—**It makes the scalp healthy.** In doing this the dandruff is removed—the hair stops falling out—new hair grows—old hair is given new life.

SECOND—**It keeps the scalp healthy.**

What does?

Resor-Quinol Hair Tonic.

What is it?

Not an experiment, but our own well-tested formula, indorsed by physicians.

Price, $1.00 a Bottle.
Trial size, 25 cents.

FRICK DRUG CO.

Newspaper ad. of the Frick hair tonic.

Alcohol ..... 4 ounces.
Spirit of myrcia.....16 ounces.
Rose water ..... 9 ounces.
Mix and perfume with oil of
bergamot .....½ drachm.
Oil of rose geranium.....½ drachm.
Oil of cologne.....½ drachm.

Add the oils to the alcohol first. Add aromatic sulphuric acid, three drachms, to the quinine. Mix all. Filter, twice if necessary. This makes a full quart. The amount of alcohol is 50 per cent.

We dispense the tonic in a six-ounce sprinkler-top bottle, with the label on the flat side of the bottle. The total cost of one bottle is 20 cents. It brings us $1.00.

SECOND PRIZE FORMULA.

By I. S. Pladson, Sturgis, S. D.

This formula has given good satisfaction. The preparation supplies both germicidal and tonic properties, which should be the first aim of any good hair tonic. The resorcin is antiseptic and the cantharides a powerful local stimulant. The betanaphthol furnishes a good germicide. The jaborandi tends to restore the natural color of the hair, though it does not dye or stain the hair. The formula reads:

Resorcin	10 grammes.
Tincture of cantharides	10 Cc.
Fluidextract of jaborandi	10 Cc.
Betanaphthol	10 grammes.
Oil of bergamot	15 minims.
Glycerin	60 Cc.
Alcohol, Rose water..ää q. s. to make	500 Cc.

No sediment is deposited on standing, nor does the product need to be filtered. It has a good color and pleasant odor. It is put up in eight- and sixteen-ounce dark, amber-colored bottles with sprinkler top. It sells for fifty cents and a dollar, which gives a good margin of profit. With a little push it ought to be a good seller with any one.

THIRD PRIZE FORMULA.

By F. P. Theriot, Gretna, La.

Resorcin	1 drachm.
Quinine sulphate	1 scruple.
Bay rum	4 fluidrachms.
Glycerin	4 fluidrachms.
Tincture of cantharides	2 fluidrachms.
Tincture of capsicum	2 fluidrachms.
Fluidextract of jaborandi	2 fluidrachms.
Alcohol	2 ounces.
Water, q. s. ad	16 ounces.

Mix and dissolve. Florame extract, 1 drachm, for perfume.

The preparation may be colored red if desired by means of red saunders.

FORMULAS RECEIVING HONORABLE MENTION.

In addition to the three prize winners, the committee thought the following formulas were deserving of honorable mention:

BY C. A. HOUGEN, DURAND, WIS.

We generally put our hair tonic up in half-pound perfume bottles or in plain 8-ounce ovals with a purple cap over the cork. It sells for 75 cents. As it only costs about 20 to 25 cents, the profit is a very fair one:

Boric acid	1 ounce.
Salicylic acid	½ ounce.
Resorcin	4 scruples.
Glycerin	1 fluidounce.
Oil of rose geranium	12 minims.
Oil of bergamot	4 minims.
Alcohol	1 pint.
Water distilled to make	1 quart.

Color with tincture of curcuma if wanted.

We sell the product on a strict guarantee that if it does not positively stop falling hair and eradicate dandruff "you get your money back." We have sold hundreds of bottles and have only had one returned so far, and that one we sold to a man who asked for something else, and wanted it for his wife. That he wanted it for her he did not tell us, or we should have known better. She refused to try it, and consequently missed a good thing.

We have used newspaper ads. to push this preparation—sometimes with noticeable results and sometimes with indifferent success. Our long suit is to push it over the counter to people who want something for themselves.

BY H. C. LANDAU, GETTYSBURG, PA.

This is a hair tonic which I have used for years and on which I have an excellent trade. It always gives satisfaction and never arouses a complaint. It will stop an itching scalp within an hour, stop dandruff in two applications, and will promote the growth of hair. It is sold under this guarantee, and I have never returned a cent. Every bottle sold brings a demand for another one.

Quinine sulphate	2 drachms.
Resorcin	20 grains.
Menthol	20 grains.
Tincture of capsicum	6 drachms.
Tincture of cantharides	6 drachms.
Spirits of ammonia aromatic	4 drachms.
Glycerin	4 drachms.
Alcohol diluted, q. s. ad	16 ounces.

Perfume with dactylis or to suit. No artificial coloring is used. Apply to scalp with finger-tips, massage lightly every night for a week, then once a week, for an invigorating tonic.

The prices are: 4 ounces, 25 cents; 8 ounces, 50 cents; 16 ounces, $1.00.

BY WILLIAM H. TABACNIC, PH.G., ST. LOUIS, MO.

Our preparation can be made for about 85 cents a quart. It is put up in four-ounce fancy bottles and retails for 50 cents a bottle. A package of this preparation, including cork, label, etc., costs about 15 cents, netting a profit of about 70 per cent. Of course it could be made a little cheaper by decreasing the amount of alcohol, etc., but I would hardly advise it as I have found the proportions of the ingredients in this formula to be just right. I have used the formula for several years and have observed it is a good repeater. It is an excellent preparation for dandruff and falling hair, and an elegant hair dressing. It is to be rubbed into the scalp as often as required.

I recommend when selling my hair tonic the use of my liquid shampoo for shampooing the hair. This is merely tincture of green soap perfumed. I seldom fail to make a sale of my shampoo with each purchase of my hair tonic. The latter is:

Mercuric chloride	2 grammes.
Salicylic acid	10 grammes.
Resorcinol	30 grammes.
Tincture of cantharides	30 grammes.
Glycerin	100 grammes.
Alcohol	500 Cc.
Water, q. s. to make	1000 Cc.
Perfume to suit (rose).	

Dissolve the bichloride, salicylic acid, and the resorcinol in the alcohol. Add the tincture of cantharides, glycerin, and water. Perfume and filter.

I use a rose odor myself, but the individual can use any odor that pleases. This preparation acquires a light lavender color, without any coloring agent being used.

BY E. W. THRALLS, HAYDEN, COLO.

Salicin	1 drachm.
Resorcin	2 drachms.
Tincture of cantharides	2 drachms.
Tincture of capsicum	2 drachms.
Glycerin	1 ounce.
Rose water	6 ounces.
Bay rum, q. s. ad	16 ounces.

Dissolve the chemicals in the rose water. Add the tinctures and the glycerin, and finally the bay rum. Color to suit with tincture of cudbear, N. F.

I have found this to be highly successful in cases of dandruff and falling hair, and as a stimulant to the scalp. It is of great value in eczematous diseases of the scalp. It is easily and quickly prepared on account of the ready solubility of the chemicals. I have never exploited it nor advertised it as shelf goods, but have handed out many bottles as a special preparation. I charge 50 cents for a six-ounce bottle. The cost, as one can readily see, is inconsiderable.

BY G. W. PFENDER, CHICAGO, ILL.

Our preparation has proved very good. It will certainly stop the formation of dandruff, loss of hair, and cause new hair to grow when other remedies have no effect. Three of our customers now have a splendid growth of hair after it had fallen out from syphilis. Many others use it as a general hair tonic.

Resorcinol	3 drachms.
Glycerin	1 drachm.
Tincture of cantharides	3 drachms.
Water and alcohol, enough to make	6 ounces.

Perfume with a few drops of a mixture of oil of bergamot, geranium, citronella, and cinnamon.

BY OTTO C. McCARTY, CARTHAGE, INDIANA.

This preparation has been used in my brother's barber shop for a number of years and was originally obtained from a New York hair specialist:

Spirit of ammonia aromatic	½ ounce.
Solution of potassium arsenite	½ ounce.
Tincture of nux vomica	½ ounce.
Tincture of capsicum	2 drachms.
Tincture of cantharides	2 drachms.
Glycerin	2 drachms.
Bay rum	1 ounce.
Rose water, q. s.	8 ounces.

Rub well into the scalp two or three times a week for dandruff and falling hair.

This is the best remedy I have ever seen for dandruff, falling hair, and itching of the scalp.

BY DAVID I. COHEN, PH.G., JERSEY CITY.

Quinine alkaloid	½ drachm.
Mercuric chloride	2 grains.
Chloral hydrate	2 drachms.
Resorcin	1½ drachms.
Tincture of capsicum	2 drachms.
Tincture of cantharides	½ ounce.
Oil of bay	15 drops.
Alcohol	6 ounces.
Aqua, q. s.	16 ounces.

Directions: Massage well into the scalp once a day, preferably on retiring. In obstinate cases should be used twice daily until improvement is noticed.

BY CHARLES R. ARCHIBALD, NOKOMIS, ILL.

Pilocarpine nitrate.....	0.4	gramme.
Quinine sulphate.....	0.14	gramme.
Tincture of cantharides....	12	Cc.
Tincture of capsicum.....	12	Cc.
Spirit of myrcia.....	90	Cc.
Alcohol, q. s. ad.....	180	Cc.

Mix and make solution. Perfume to suit.

Apply daily to the scalp.

BY D. COHEN, LOS ANGELES, CAL.

Resorcin	15 grains.
Salicylic acid.....	15 grains.
Boric acid	15 grains.
Quinine sulphate.....	10 grains.
Tincture of cantharides.....	1 drachm.
Tincture of sanguinaria.....	1 drachm.
Tincture of lavender compound.	1 drachm.
Alcohol	2 ounces.
Bay rum to make.....	8 ounces.

BY C. J. WALL, GRAPEVINE, TEXAS.

Resorcin	1 drachm.
Tincture of cantharides.....	2 drachms.
Fluidextract of jaborandi.....	2 drachms.
Tincture of cinchona flava.....	2 ounces.
Essence violettes.....	1 drachm.
Spirit of myrcia.....q. s. ad	8 ounces.

Mix.

BY F. D. G. WALKER, ROCK ISLAND, ILL.

Arsenous acid.....	6 grains.
Potassium bicarbonate.....	2½ drachms.
Sulphuric acid.....	5 minims.
Glycerin	1 drachm.
Alcohol	4 drachms.
Oil of rosemary.....	1 minim.
Oil of lavender.....	2 minims.
Caramel enough to make light amber.	
Water sufficient to make.....	12 ounces.

Mix.

Apply to the roots of the hair, rubbing briskly, every two or three days for three weeks. Then use once a week to keep the scalp in good condition.

BY M. KALMANOR, MORRIS PLAINS, N. J.

Quinine sulphate.....	10½ drachms.
Tincture of capsicum.....	7 drachms.
Tincture of cantharides.....	4 ounces.
Fluidextract of jaborandi...	4 ounces.
Corrosive sublimate.....	21 grains.
Bay rum.....	26 ounces.
Oil of lavender.....	10½ drachms.
Glycerin	10½ ounces.
Alcohol	42 ounces.
Purified talcum.....	2 ounces.
Water to make.....	1 gallon.

Dissolve the quinine and oil in the alcohol. Add to it the corrosive sublimate previously dissolved in hot water. Then add to this the rest of the ingredients. Let it stand for 24 hours and filter.

BY C. M. EVANS, MT. HOREB, WIS.

Resorcin	2 ounces.
Glycerin	2½ ounces.
Tincture of cantharides.....	2½ ounces.
Tincture of cinchona comp.....	5 ounces.
Alcohol,	
Bay rum, of each.....	3 pints, 12 ounces.

Apply to the scalp two or three times a week.

BY CARL R. FIEBICH, PROVIDENCE, R. I.

Resorcin	2 drachms.
Salicylic acid.....	½ drachm.
Castor oil.....	1 ounce.
Alcohol	8 ounces.
Tannic acid.....	10 grains.
Distilled water enough to make	2 pints.
Perfume Otto of Jockey Club..	15 drops.
Color with "Evergreen".....	10 drops.

BY W. M. RICKERT, FAYETTE, IOWA.

Corrosive sublimate.....	2 grains.
Tincture of cantharides.....	½ ounce.
Glycerin	½ ounce.
Resorcin	2 drachms.
Alcohol	4 ounces.
Distilled water q. s. to.....	8 ounces.

Mix.

Apply night and morning, rubbing in well with the finger-tips.

We have colored it and perfumed it, but most of our trade prefer it as given above.

BY FRANK W. SMITH, BUFFALO, N. Y.

Sodium chloride.....	120 grains.
Precipitated sulphur	60 grains.
Lead acetate.....	60 grains.
Glycerin	½ pint.
Bay rum	3 fluidounces.
Jamaica rum.....	¼ pint.
Water	1 pint (not more).
Grain alcohol.....	1 fluidounce.

Scent to suit, bergamot oil prefererd.

BY F. P. TAYLOR, MINOT, N. D.

Resorcin	2 drachms.
Tincture of cantharides.....	1 drachm.
Tincture of capsicum.....	1 drachm.
Oil of bergamot.....	15 minims.
Bay rum.....	1 ounce.
Glycerin	4 drachms.
Alcohol, enough to make.....	4 ounces.
Color with green vegetable coloring, ...	15 minims to 4 ounces.

Rub in the scalp with tips of fingers twice a week.

CARMEL HAIR TONIC A SELLER.

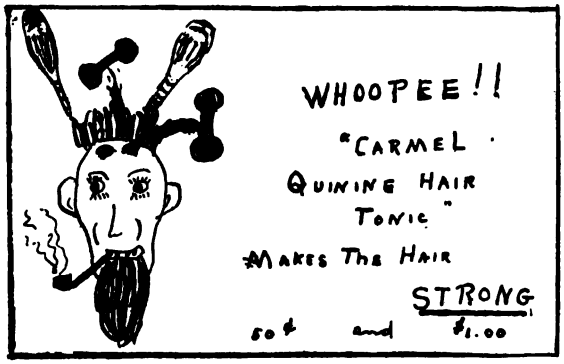
BY H. KALLIWODA,
San Francisco, Cal.

For a number of years I have been putting up and selling "Carmel Hair Tonic" with gratifying results. My preparation is a winner and a repeater. I put it up in ordinary prescription ovals, 8 ounces, and sell it for $1.00. I also run a trial size, a 4½-ounce panel, which sells for 50 cents.

I attribute a great deal of my success to the simple yet impressive style of my package, as well as to its merits.

The bottle should be tightly corked, capped, and string-sealed. It should have a good label, not a plain one. Spend a cent at least for it. A woman's head with an abundance of hair makes a fine centerpiece, around which the name appears. The package should be wrapped with transparent parchment paper, making a neat and attractive appearance. The word "Quinine" catches many. I always keep a few bottles on my counter, *priced*. Any one wishing another hair tonic gets it, but I often manage to get rid of mine instead, not by the "just as good" stunt, however, but by a nice, convincing line of talk. I put my personal recommendation behind the article. If you have a nice head of hair, show it to your customer.

Once in a while I display it. Sometimes I get a few china eggs and door-knobs and place them in the window with a sign to this effect, "Guaranteed to grow hair on a door-knob, why not on *your* knob?" The bottom of the display is covered with mattress stuffing or barber-shop trimmings. I have a large sign as follows:



A reproduction of a window sign used by Mr. Kalliwoda to advertise his hair tonic—purposely made amateurish.

The crudeness of my picture draws attention. The rest of the window convinces.

Here is another little "booster." In my talk to a customer, I mention the fact that he can feel it almost as soon as it is applied. This is true. The menthol is added for that purpose. It gives a peculiar cooling sensation, as though the hair were beginning to sprout. Anyway, it affects the mind, and that is half the battle. Directions should emphasize to rub well. For the friction and circulation restored, is another factor in propagating the growth.

The formula and cost of the tonic is here given.

"CARMEL QUININE HAIR TONIC."

Pilocarpine hydrochloride—2 drachms, @ $1.50 a drachm	$3.00
Resorcin—5½ ounces, @ $1.10 a pound	.39
Chloral hydrate—5½ ounces, @ $1.18 a pound	.40
Quinine sulphate—5 ounces, @ 16c per 100 ounce lots	.80
Betanaphthol—5½ ounces, @ $1.45 a pound	.49
Menthol—1 ounce, @ 60c an ounce	.60
Alcohol—1½ gallons, @ $2.96 a gallon	4.44
Glycerin—1 pint, @ 22c a pound	.27
Oil of bergamot—1 ounce, @ $6.00 a pound	.40
HCl, Tincture of alkanet—ää q. s	.05
Water, q. s.—5 gallons	.35
	$10.84

1. Dissolve the pilocarpine in 2 ounces of water; add tincture alkanet, q. s.

2. Dissolve the resorcin and chloral in 1 quart of water.

3. Dissolve the oil of bergamot in 8 ounces of alcohol.

4. Dissolve the naphthol and menthol in 1 quart of alcohol.

5. Dissolve the quinine in alcohol (acidulating with HCl until end point is reached).

6. Mix the remainder of alcohol with the glycerin. Add 1 gallon of water.

7. Now mix solutions 3 and 4, then 5. Add this mixture to 6. Add solution 2.

8. Now gradually add water to make 5 gallons. A slight precipitate may form, probably naphthol. Filter, add solution 1, and put up in eight-ounce bottles.

Additional costs may be summed up as follows:

Labels	$ .50
Corks—No. 50, $3.50 M.	.28
Caps—$0.35 per gross	.29
Bottles—@ $3.75 per gross	3.12
Parchment paper	.10
Sealing wax	.05
½ day's labor	1.50
	$ 5.84
Cost of tonic	10.84
Total cost of 80 bottles	$16.68
80 bottles @ $1.00	80.00
Profit on *cost*	$63.32

or Profit on *cost* approximately....38.5 per cent.

The color and odor may be varied to suit the taste. Without alkanet the tonic is lemon color. Some people prefer a green, some a brown, etc.

The cost may be materially reduced by omitting the pilocarpine. But I consider it a valuable ingredient and would not like to do without it in my own product.

And after all is said and done, I want to add that "Carmel Quinine Hair Tonic" has proved to be a "crackerjack." It has "brought home the bacon."

A TWO-PACKAGE HAIR TONIC.

BY S. C. COOPER, PHM.B.,
Lion's Head, Ont.

Perhaps more buncombe has been written and advertised about hair restorers than about any other medication, and a prize offer for the best formula for a hair tonic makes the pharmacist get right down to bed-rock.

The study of diseases of the hair does not reveal the definite unanimity that is apparent in most scientific data. Dead hair, like dead men, cannot be resurrected. The causes of baldness may be:

1. Temporary, through fever or sickness.
2. Pressure or irritation by head-dress or aught else upon the blood-vessels of the head, thus damming up the canals that supply nutrition.
3. Decomposition of perspiratory and oily secretions, giving rise to the production of bacteria, thus wasting the hair.
4. Dryness and disease of the scalp, usually termed dandruff.

We may regard the last three as producing permanent baldness if proper treatment be neglected. And we may safely infer that if treatment prove satisfactory in preventing permanent baldness, it will prove helpful in cases that are temporary. To master the situation we must:

1. Destroy or remove the disease, microbe, or germ, any or all of them.
2. Retain the area in a prophylactic condition.
3. Nurture mechanically, physiologically, and artificially that area, to produce the desired result.

So then proper treatment should comprise a cleanser—mechanical to remove superficial waste, chemical to act upon the oily secretions without undue causticity. Under mechanical means may be mentioned the use of warm water, soap, massaging with the finger-tips, drying by warm air rather than by violent rubbing of the hairs, perfectly clean head-dress—in this the Hindu teaches us a lesson—and exposure of scalp to the atmosphere. Under chemical means may be mentioned antiseptic head-dress, a solvent of fatty excretions, and exposure of the scalp to the ozone of the air and to sunlight. We inscribe below what we consider to be an ideal cleanser, which may be used daily for a week, then as needed.

The cleanser should always be followed after an interval of eight to twelve hours by a tonic for the hair. An ideal tonic should comprise a germicide, an irritant, a rubefacient, and these in a soothing attractive vehicle.

After assembling, comparing, and rejecting a great many ingredients, I consider the formula of the hair tonic given below can for druggists' general purposes scarcely be improved upon. Furthermore, if the general system is toned up by an internal alterative and the rules for health relating to cleanliness, diet, exercise, and good living observed, the scalp will share the benefit with the rest of the body.

SCALP CLEANSER.

Oleic acid	3½ ounces.
Alcohol (90 per cent)	1½ ounces.

Mix and neutralize with about ¾ fluidounce of saturated solution of potassium hydroxide; when cool add oil of lavender 10 minims; ether to 10 fluidounces.

HAIR TONIC.

Borate of soda	200 grains.
Salicylic acid	40 grains.
Boiling water	10 ounces.
Tincture of cantharides	2 ounces.
Bay rum	1 ounce.
Rose water, enough to make	16 ounces.

The borax and the acid should first be dissolved in the boiling water, then cooled and the other liquids added. It should be well shaken and filtered before use.

It will be seen that we have avoided a shotgun formula. We have put in everything with a clear intention. We have made no guess, and offer no apology for the simplicity of the formula. We believe it is the best general recipe that has been formulated, and what is more, time and again it has "done the work."

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

(*Continued from May* BULLETIN.)

CHAPTER VI.

WORKING THE BEST SCHEME OF ALL.

The scheme that I followed up in the last few years is one that involved the use of cash register checks, and while it was something of an expense, it certainly did get the results.

The premium plan in various forms has been demonstrated time and again to be the best of all trade-getters. It has its disadvantages, and I would not recommend it in all cases. But where it can be properly used, it has no equal.

Mr. Farrington.

PREMIUM PLANS.

In carrying out my plan I used a check-printing cash register, and the final scheme was only developed after experimenting with several which were successful only in a moderate degree.

One check plan that I tried was that of giving a pound box of candy to the person whose purchase drew a check with an even hundred number on it. This meant that check No. 100, 2300, 400, or 4000 drew a prize. I was able to get up only a little interest in this. It did not make any business as far as I was able to determine.

Other plans met with only partial success, and I found that one reason was that frequent changes in the scheme mixed up the people. They would just get the details of one plan well into mind when they would find that it had been discarded and some other taken up. Thus what seemed like good business, giving the public a variety and a change, proved a disadvantage. Any good, fair plan adhered to indefinitely and well advertised would, I am sure, produce profitable results in the end.

My final plan was to keep a standard set of premium goods, the same line continuously with occasional additions, and to give these out for set sums in cash-register checks. For instance, I picked out a pair of cut-glass salt and pepper shakers to give away for $10 in checks. These and all the other premiums I set out to buy for about 5 per cent of the total amount of the checks. I picked out such goods as could be listed to the public at 10 per cent of the face value of their checks. An offer of 10 per cent of the checks given back in premiums would, I knew, look very good to every woman, and particularly so if I chose for premiums articles that would especially appeal to the feminine instinct.

THE CUT-GLASS OFFER.

Every woman likes cut glass, and cut glass pays a good profit. Hence my choice of this line at first. Here follows the proposition as

*Copyright, 1912, by Frank Farrington.

I outlined it in one of the first circulars I sent out:

SAVE THIS!!!

OUR FREE CUT-GLASS OFFER.

THIS LASTS TILL AFTER CHRISTMAS.

Save Your Checks and Get Cut Glass Presents Free.

With every cash purchase we give a check showing the amount of the purchase. These checks are good for prizes if dated Oct. 1 or later.

For $10 in checks a pair of cut-glass salt and pepper shakers, worth $1.25.

For $15 in checks a cut-glass bonbon dish with handle, worth $1.75.

For $20 in checks a cut-glass bonbon dish worth $2.

For $25 in checks a cut-glass olive dish worth $2.75.

For $30 in checks a cut-glass bonbon dish worth $3.25.

For $35 in checks a cut-glass celery tray worth $3.50.

For $40 in checks a cut-glass sugar bowl and cream pitcher worth $4.50 (not given out separately).

For $45 in checks a cut-glass berry bowl worth $5.

For $50 in checks a cut-glass water bottle worth $5.50.

This is all fine, high-grade cut glass, and will make elegant Christmas presents.

To find what your checks are worth just add up the amounts of the purchases indicated on them in red ink.

This offer will not be withdrawn until after the Holidays, and perhaps not then.

Save your own checks and get your neighbors who are not saving for themselves to save them for you.

You can see these prizes on exhibition in our store at any time.

If you are short of checks and want a premium at any time you can bring in what checks you have and you will be allowed 10 per cent of their face value on any cut-glass article, paying the balance in cash.

Here are some good, seasonable goods.

(Then followed a few special items in good values.)

This plan was started October 1, with a view to running it till January 1. Its popularity, however, and the realization of the disadvantage of making frequent changes in offers, caused me to retain it in force.

The approach of Christmas made it particularly easy to interest the people in the plan, and window displays of the cut glass were mighty attractive, headed as they were by big cards reading "These Given Away!"

I realized that the success of the plan lay in interesting the women, and we did everything to get them to begin saving their checks. We placed big cards about the store calling attention to the plan and pointing to the display of the premium goods.

The clerks were instructed to take pains to hand the checks to customers and not merely throw them out on the counter. And right here is where the plan may fall down if not carefully handled. People not knowing of the plan will not be looking for the checks, and they will go away without them unless they are placed in their hands. This means that Mrs. A. hears Mrs. B. talking about her checks, and she thinks, "I didn't get any check with that hot-water bottle I bought," and she comes back and makes a fuss.

It is unavoidable that people get away a good many times without checks, and a rule must be made at the outset to cover such cases. In my store I made it a practice to give to any one coming back and claiming it, the check that was asked for. This may in a limited number of cases have resulted in the loss of a

Mr. Farrington's store as it was when he sold it last year.

check. I don't believe it ever did, but even if it did, it was far better than to send some one away with a grouch.

In our store we sold periodicals and took magazine subscriptions, and we gave checks on these transactions for a time, but eventually found it desirable to discontinue it, as it was often true that a subscription would not pay us a net profit with the cost of the check out.

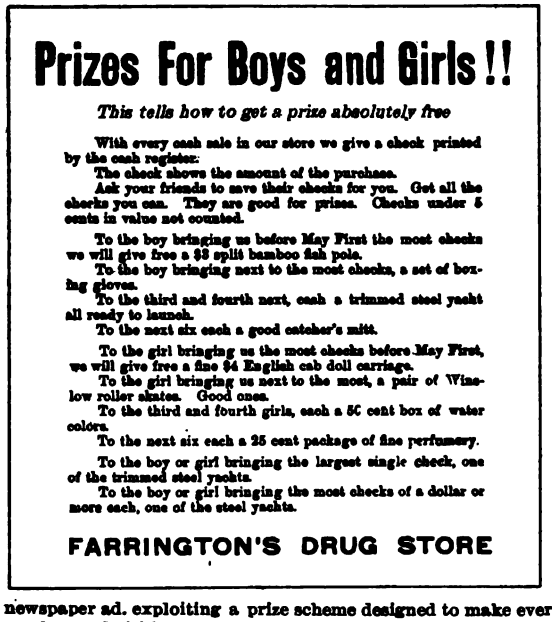
One important result of the check system when once I got it under way was to eliminate most of the small amount of credit business we had been doing. As soon as a family got the check-saving habit, they would bring the money every time, and if they didn't have it, they would go home and get it or wait till the next day.

Of course most of our credit business was in small amounts. Our losses had always been a negligible quantity. This made them less than that.

For the store that has a good deal of credit trade this scheme is one of the best to turn it into cash. Of course in the case of a trade, particularly a city trade, where the credit customers are mainly wealthy families, the premiums would not attract.

FRUITS OF THE PREMIUM PLAN.

But the big feature of the premium plan is that it makes every customer a fast customer. The woman who is trying to get $25 worth of checks, is going to buy everything in the drug-store line possible at the store where she gets the checks. If she is passing a store on the other side of the street and happens to think that she needs a ten-cent tube of vaselin, she is not going in there for it. No, sir! She is going to cross the street and get that ten-cent check. Every little bit helps.



Prizes For Boys and Girls!!

This tells how to get a prize absolutely free

With every cash sale in our store we give a check printed by the cash register.

The check shows the amount of the purchase.

Ask your friends to save their checks for you. Get all the checks you can. They are good for prizes. Checks under 5 cents in value not counted.

To the boy bringing us before May First the most checks we will give free a $3 split bamboo fish pole.

To the boy bringing next to the most checks, a set of boxing gloves.

To the third and fourth next, each a trimmed steel yacht all ready to launch.

To the next six each a good catcher's mitt.

To the girl bringing us the most checks before May First, we will give free a fine $4 English cab doll carriage.

To the girl bringing us next to the most, a pair of Winslow roller skates. Good ones.

To the third and fourth girls, each a 50 cent box of water colors.

To the next six each a 25 cent package of fine perfumery.

To the boy or girl bringing the largest single check, one of the trimmed steel yachts.

To the boy or girl bringing the most checks of a dollar or more each, one of the steel yachts.

FARRINGTON'S DRUG STORE

A newspaper ad. exploiting a prize scheme designed to make every boy and girl in town a rooter for the Farrington store.

This is not theory; it is fact.

That woman is also going to ask her friends whether they have any checks that they don't want. They may turn over the first lot to her, but when they see the dandy piece of cut glass she gets for them, they will begin to save for themselves.

It is a little difficult at first to show people that their purchases are going to amount to enough in the near future to enable them to get a premium. They do not realize that their purchases count up to enough to amount to anything. They buy more at a drug store than they think.

Once show them that their checks will get them something before long and they are yours. In a small town a thing like this takes hold more rapidly than in a larger one. It spreads by word of mouth.

The premiums must be given as careful display as if they were goods offered for sale. And when people want to see them, either to take up one with their checks or merely to find out what they are like, they should be waited upon with the same courtesy as if making a purchase. If you offer people premiums and then are at all "crusty" about handing them out, you will soon spoil the effect of your gifts and make people unwilling to bother with them. Don't let it appear that you are putting a person under obligations, but rather give him the premium as his right, which it really is.

After running the premium plan for a time I found it desirable to add other premiums in order to interest more people. Some housewives did not care for cut glass. A good many men who would save checks for something they themselves wanted, would not bother with cut glass.

To help out, I added an assortment of dollar watches which I gave for $10 in checks, though I did not state that they were dollar watches.

I gave out fountain pens, but with the understanding that they were not guaranteed as to durability, etc. For these I used some of the very heavily ornamented gold (?) and silver (?) kinds which cost little but look very valuable. A heavily gold mounted pen can be bought as low as $1 net.

Japanese chinaware I found a good line—complete tea sets, cream and sugar sets, etc. These reduced the cost of the premium to about 4 per cent, and this figure was the one finally adopted as a cost basis.

This premium plan raised the business in a year from $12,164 to $13,859 cash receipts, which is a splendid gain in so small a community, where there is almost no chance to increase the total volume of trade.

In order to show the reader to what an extent the people went into the check-saving business, I want to call attention to the fact that recently when I sold my business and the checks were all called in either for premiums or for exchange checks which would be good with the new firm, the total checks brought in

amounted to $3284, which represented the average amount constantly outstanding. Of course this looks big, but four per cent of it would not impoverish you at any time.

WHEN TO STOP.

The greatest difficulty with this plan is in getting rid of it if one wishes to do so. When it stops increasing the business, it should not be carried any longer. It is too much of a load unless it is getting enough trade, not to be had otherwise, to pay for it.

It may be discontinued at a change of ownership, of course, though that is not wise, as it makes the new concern look penurious. A special bargain sale may be made offering many attractive prices and the announcement made that in the future, instead of checks, extra values are to be given to offset them.

But about the best way, and the one least likely to result in a slump in the business, is to keep reducing the cost of the premiums by giving a little less value until people slowly lose interest. At the same time the variety of premiums may be limited with the same object.

Of course it is difficult to reduce the value of the premiums by raising the amount of checks required for a specific article or giving an inferior premium for a given amount. But it can be done in other ways. For instance, the premium at $10 costing 50 cents can be changed to one of silverware costing 40 cents, or to one of Japanese china costing 35 cents, etc. We found silverware of standard patterns valuable as premiums. We could buy a certain well-known make of plated silver teaspoons of an advertised pattern for $2.41 per dozen. When a person brought in $5 in checks he got one of these. Customers could keep getting more as they accumulated checks until they possessed a dozen, and then they could begin on the knives or the forks of the same pattern, and so on.

We found it to be very seldom that people cared to pay the difference. If they had not checks enough, they would go away and wait till they had more.

ADVERTISING A PREMIUM PLAN.

A few newspaper advertisements are reproduced showing how we called attention to our premium plan. And the advertisement of "Prizes for Boys and Girls" shows how a previous very successful check plan was worked out. This one got all the children to working for the checks. While the total cost was not much, it certainly did get business.

This was put on in the spring, and the window display of the prizes secured the interest and coöperation of the youngsters right away. Give a boy a chance to get a baseball mask or glove free, or a good fishing pole, just as the season is opening, and he will work his head off trying to get it. The girls were just as enthusiastic as the boys, too, and the list of prizes was long enough so that every one had a hope of getting something.

The success of such a prize plan is always increased by making the list long enough so that every possible contestant will think, "Well, I can't get the first prize, perhaps, but there's enough of them, so I ought to be able to get something."

While not bearing any relation to the premium business, I want to crowd in right here a recommendation that the druggist take more trouble to get the business on bug killers.

There is a steady and quite rapid increase of the use of all kinds of insecticides—on plants, trees, animals, etc. The stockowner and the farmer and fruit-raiser are all banding against insect pests. The druggist who goes after

Some Farrington newspaper ads.

business along such lines, making a specialty of pushing good and modern preparations, is sure to be well repaid for it.

I went after this business with imitation typewritten letters and newspaper ads. and with the literature put out by the makers, and it developed into some of the best paying business the store had.

The reproduced advertisement, "Bug Killers," is a good type of the newspaper advertising along this line.

In the next chapter, which is the last one of this series, I am going to tell something about the use of special lines, and I shall also give an idea of the profits of the business, showing its receipts and expenditures for comparative terms.

(To be concluded in July.)

A STRIKING SODA WINDOW.

By CARL E. BASTIAN,
Dansville, N. Y

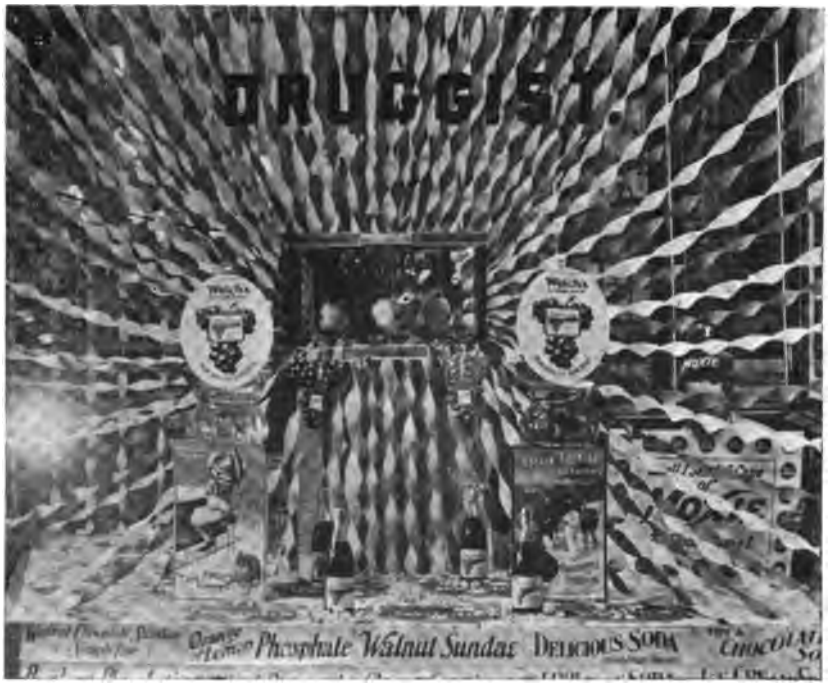
In this article I wish to describe a window display that appeared in the store of E. N. Bastian, Dansville, N. Y. It was arranged especially for the "old-home-week" celebration and stimulated soda business beyond all previous records.

The colors in the trim were grass green and white. The strips running from the border of the window to the box in the center directed the course that the eye should follow. The box contained two mirrors set back at an angle of about 90 degrees. These reflected three dishes and three lights.

We used cotton with artificial cherries to represent the ice cream. In this, I followed a suggestion which I had read in the BULLETIN OF PHARMACY for preserving flowers in paraffin, using them in the display. Sweet peas were scattered about the base of the trim, and there were roses in the box.

Welch's Grape-Juice signs were used effectively in the center, while placards of Moxie and other beverages appeared on the floor. A few bottles of grape-juice were also in evidence. Some of the store specials that found mention on the signs were walnut sundae and walnut chocolate sundae.

The display was full of color and naturally attracted the visitors who walked by the place during the week of the celebration.



A soda trim in the window of E. N. Bastian.

How the Druggist's Sundries Are Made.

THIRD PAPER: RUBBER GOODS.

A Brief History of the Industry—Where the Crude Rubber is Gathered—The Discovery of Vulcanization and its Bearing on the Trade—The Various Manufacturing Processes—Precautions to be Observed in Buying the Goods.

By E. C. TIBBITTS,
Adv. Mngr. of The B. F. Goodrich Company, Akron, Ohio.

It is hard to realize how our forefathers—and our very immediate forefathers at that—managed to exist without rubber.

Less than a hundred years ago rubber was practically unknown, save as a curiosity, nor for many years after its introduction was its use recognized except for the erasing of pencil marks, whence its highly inappropriate name.

Not until 1820 was the first practical use of rubber made. In that year Charles Macintosh discovered that by dissolving rubber in naphtha and applying it to cloth, it was possible to make waterproof garments, but it was many years before any further advance was made.

VULCANIZATION AN AMERICAN DISCOVERY.

The discovery of vulcanization in 1839 may be said to have originated the modern rubber industry as we know it, and made practicable the manifold uses of rubber to which we have gradually grown accustomed.

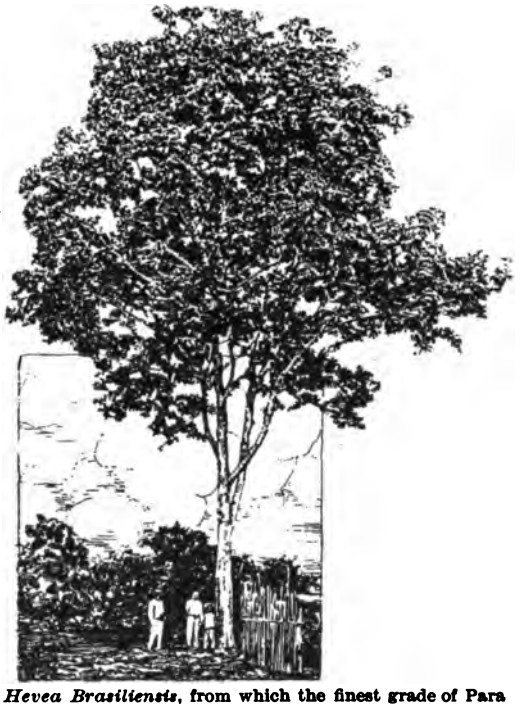
To an American belongs the credit of this far-reaching discovery, and Americans have ever since been prominently associated with the phenomenal developments which have since ensued.

Prominent among these has been the name of Goodrich, the factory having grown from a staff of 35 in 1869 to its present importance as the largest rubber factory in the world. Its present pay-roll is over 6000 and constantly growing.

SOURCE OF THE CRUDE RUBBER.

Rubber is produced in some form or other in most tropical countries, its present limits being, however, a band of about 250 miles on each side of the equator.

The product of various countries varies greatly in quality, and for practical purposes the principal sources of supply are still limited to Brazil and some parts of Ceylon, although the great increase in demand has led to the employment of many other kinds. More careful cultivation and the introduction of new plantations in many cases seeded from Brazilian trees will in time gradually broaden the area of supply besides greatly improving the quality of the product. At present by far the best rubber comes from Brazil, largely gathered from the "Hevea" trees in the forests of the upper reaches of the Amazon, and known as "Para" from its port of shipment. Such is its reputation that rubber growers in other parts of the world are importing "Para" seed in the hope of ultimately producing rubber of equal quality. But there is no doubt that climate plays an important part in the physical and chemical properties of rubber from this region.



The *Hevea Brasiliensis*, from which the finest grade of Para rubber is secured.

Furthermore, Para rubber is generally more carefully gathered and prepared for shipment, and this has had great influence in building up its supremacy in the rubber markets of the world.

Next to Brazil comes Ceylon. Scientific planting and the selection of suitable trees, together with a congenial climate, have enabled the Cingalese planters to produce a rubber which is commercially fully equal to that of their great South American rival.

Many of the other countries of South and Central America are large producers of rubber, while the Congo Free State and other West African countries have achieved an unenviable reputation in this connection.

PRICE INCREASING.

The daily increasing demand is constantly broadening the field of supply, but notwithstanding the recent great increase in this direction the price of good rubber to-day is higher than for years and three or four times what it was twenty years ago.

While the development of the automobile is generally credited with much of this increased demand, there is no doubt that rubber to-day enters far more into our daily life than is generally imagined. And while the automobile has certainly created a new industry, it must be borne in mind that it was the introduction of the rubber tire and above all of the pneumatic tire which made the modern automobile a practical success.

GATHERING—SHIPPING—MARKETING.

As most of us know, the crude rubber is usually obtained by "tapping" the trees or vines. In some countries it is still customary to fell the trees, but this is being abandoned as wasteful and unnecessary.

The "latex" or gum is not the true sap of the tree, but lies between the bark and the wood. Consequently a slight upward incision is all that is necessary. A small tin cup is then attached to the trunk by means of a wad of clay and these cups are collected when full and the still fluid contents gathered into large bowls. About half a pound only is collected from each tree at one tapping.

The next process is coagulation, which is accomplished by means of heat.

In the Para district a rod or "paddle" is dipped in the latex and slowly revolved in the smoke of a fire of palm nuts. When dry another layer is added until the resulting "biscuit" aggregates a weight of about 100 pounds.

It is then ready for shipment, and is carried in small boats or canoes for miles down river to the seaport. A cargo of crude rubber is valuable, a ton of it being worth about $2500, while a shipment of several hundred tons is not uncomman.

The principal markets are London and Liverpool, although Hamburg, Antwerp, and New York also receive large direct shipments.

The crude rubber is sold on sample, usually by public auction, and much judgment is required in the selection of the most suitable grades for the various requirements of the manufacturer.

THE MANUFACTURING PROCESS.

There is a vast difference between the crude rubber "biscuit" and the finished article. Offensive in odor and full of impurities, it is first necessary to "break down" the rubber and then wash out the impurities.

This is done with huge steel cutters and by

The illustration shows the lumps of rubber being shoveled from the washing tank to rolls, where water flows over the rubber constantly as it is being rolled into thin, porous sheets.

rollers with corrugated surfaces which tear the rubber into shreds, after which it is washed in hot water and the superfluous water expelled by further rolling, from which it emerges in large sheets. These are further dried in heated chambers at a carefully regulated temperature.

Hitherto we have dealt with more or less "pure" rubber, but for manufacturing purposes this pure rubber is practically useless and requires the addition of various ingredients, of which sulphur is one of the principal.

This unfortunately offers a large field for adulteration, and it is no exaggeration to say that some so-called "rubber" goods contain only sufficient real rubber to enable them to "hang" together.

While the goods of reliable makers are made

of freshly manufactured gum, in many of the cheaper lines it is customary to add a large proportion of "reclaimed" rubber, or in plain English, of second-hand used rubber which has been reclaimed by various processes from old tires, rubber shoes, etc.

"All that glitters is not gold," and unfortunately all is not rubber that looks like it.

VARIOUS PROCESSES.

When Pat was asked how they made a rubber ball, he answered, "Ye just take some air and shtick the rubber outside av it, an' there y'are."

It isn't quite so easy, but perhaps more interesting, as the process varies somewhat with nearly every article. Balls, bulbs, and similar articles are cut in sections from uncured rubber, and vulcanized in shaped molds of cast iron. A drop of water is placed in each before closing, and this, turned into steam by the great heat of vulcanization, "blows" the bulb into every crevice of the mold.

Others are made in press molds, partly vulcanized, and cemented together, after which they undergo a further process of curing.

Hot-water bottles and similar goods are stamped out of uncured sheet, and after the various parts have been cemented together, are cured as a whole.

The process of tube-making resembles the production of the homely sausage. Specially prepared rubber is fed into a hopper, and emerges from a nozzle in tubular form on to a table, where it is cut into suitable lengths. Larger tubes, however, are made from "sheet," and the edges cemented together by a machine which forms so perfect a joint as to be almost impossible of detection. This is the process followed in the making of the inner tubes of tires.

Rubber bands are cut from similar tubes, and after curing are cut by a machine to the required sizes. In the Goodrich factory, they are hand-picked before packing, so that none but absolutely perfect bands are ever sent out.

Small goods, such as teats, etc., are simply pressed in molds before curing. The rubber at this time is sufficiently soft to take any desired shape, which it afterwards retains through the finishing processes.

In the process of preparing the rubber, various compounds are introduced. Sulphur has been previously referred to, the proportion used varying according to the result desired. For red rubber, a preparation of antimony is used; for white, zinc; but nearly every manufacturer has his own more or less secret processes.

Space precludes further description, but practically all rubber articles follow the procedure here outlined, modified according to individual requirements.

SELLING IDEAS.

Druggists have been somewhat remiss in the attention they have given to rubber goods. They usually stock them but seldom make them a leading line. Consequently the hardware and dry goods stores have taken a deal of this trade. When nights begin to cool off, the hot-water bag or bottle is sometimes in evidence, but one rarely sees a really striking window display of seasonable rubber goods.

For the guidance of those who may not hitherto have devoted much attention to this line, we offer a short list of the principal rubber goods likely to be good sellers at different seasons. There are: Water bottles, covered and uncovered, syringes and douches, irrigation bags, air cushions, sponge and toilet bags, infants' diapers and nursing aprons, feeding bottles and accessories, teething rings, photographic bulbs and tubing, nasal bulbs, scent sprays and atomizers, rubber gloves, bathing caps, massage appliances, breast pumps, rubber bandages of various kinds, medicine droppers, ice-bags and caps, catheters, bedpans, chair and crutch tips, rubber bands, pencil rubbers, etc., and other medical and surgical appliances of various kinds.

These are all paying lines, and an occasional window display will do much to stimulate trade. It is little use having goods in stock if you do not show them. Attractive trims can be easily arranged, as most of the goods can be shown in the original boxes.

A final word of caution: *Don't overstock.* Rubber goods rapidly deteriorate with exposure, and it is better to get frequent supplies than to run the risk of carrying articles over from season to season.

THE VICTOR VANQUISHED.

In which a Druggist Matches Wits with a Money Lender—He Accepts a Loan at Extortionate Terms, but Gets Square in a Foxy Manner—Some Amusing Situations.

By ERNEST C. CRIPPS,
Berkhamsted, England.

"It is very certain, my dear, that *something* must be done, and that quickly," said John Stirling, as he cracked an egg and attacked its contents with the air of a desperate man.

He and his wife were at breakfast. She was somewhat crushed and worried looking, he prematurely bald and apologetic, taking hurried glances at his correspondence in the pauses of satisfying a still hearty appetite.

"It never rains but it pours," moodily continued the druggist, for that was his calling. "Just listen to this."

" 'Messrs. Squills & Ipecac beg to remind Mr. Stirling that his account has now exceeded their limit of credit, and unless ——.' But there, you know the rest, my dear, don't you?

"Then here again from Peters & Co. Where is it? Oh, yes. '—— thank Mr. Stirling for his kind order for drugs, which is having their best attention. In the meantime they beg to remind him that his account, etc., etc.' The last quarter's rates are overdue, and the water company threatened last week to cut off the supply if the rate was not paid in seven days; and the coal is almost out. Cash *must* be obtained somehow."

"It is no use asking your uncle," said Mrs. Sterling, despondently. "You remember how sarcastic he was last time. As for Aunt Martha, I would sooner *die* than let her know the plight we are in, wealthy though she is."

"If only some of those confounded customers of ours would pay up," interjected the druggist, "we could soon put matters right; but there seems precious little likelihood of that."

"But here's something I seem to have missed. I say, Maud, this looks more hopeful. Just you listen.

" 'A private gentleman having a large sum of uninvested capital is willing to lend the same in sums of £10 to £1000, on note of hand alone, to farmers, tradesmen, mechanics, householders, and any respectable and responsible person. Distance no object. Interest is reasonable, and repayment can be arranged to suit the convenience of the borrower. Upon receipt of application the lender will call and carry out the transaction without delay. All business treated as strictly confidential.'

"That certainly *sounds* all right. I'll keep the address, for we may yet have to apply to some such person. And now I must get into the pharmacy."

A few years before Stirling had taken a house and shop in one of the main streets of Barkington. With a few hundreds of pounds and a young wife, he had looked out on life through rose-colored spectacles. But as the years went by and the capital disappeared, and the young wife began to look middle-aged, the enthusiasm of his earlier years showed signs of dying out. Certainly he had built up a business which was now paying its way, but in doing so debts had been piled up and creditors were getting importunate. If he could only hang on another year or two, and get in a few of his accounts, he might yet weather the storm. For he was still solvent, but the lack of ready money barred the way.

It is not surprising therefore that a day came when it had to be procured, and a letter was despatched to Mr. Ready-cash, the author of the foregoing artfully worded epistle.

Needless to say this gentleman in due time responded, and one day appeared in person at the pharmacy. He was a short, alert man with a clean-shaven face, and his voice was pitched in a high key.

He wasted no time in preliminaries, but at once stated his mission.

"I understand," said he, "you wish to borrow fifty pounds. Will you kindly fill in answers to the questions upon this form?"

The druggist never realized before what an insatiable curiosity prompts those who engage in the money-lending business. When he was metaphorically drained dry of all possible information respecting his past and present, the man of cash gave his decision.

"Well, sir, I am prepared to advance you

the sum you require, namely fifty pounds, payable in monthly installments of ten pounds, the first to be made a month from date."

"And what interest," queried the druggist, "will you charge me for this accommodation?"

"Oh, the usual," said the money-lender, taking out his pocketbook and abstracting from thence a stamped blue paper. "The usual interest we charge for such cases as yours is twenty-five pounds!"

The sitting-room seemed to swim around poor Stirling. Twenty-five pounds for the use of fifty, and he was to commence repayment in a month's time!

He tried to work out the rate of interest, but his brain reeled and he could not. Oh, but it was monstrous! He could not take the loan on those terms. Far better to pay the man's expenses down and back, and scrape along somehow without it. But there was his wife! She was depending upon the acquisition of a little ready money to pay the household debts, and set matters on a more satisfactory footing.

"But, man," at last he said to the financier, "what you suggest is sheer robbery. You are satisfied that my assets will cover all my liabilities, including this suggested loan. Why not make it ten pounds; that will be nearly a hundred per cent per annum!"

But the other was obdurate and to all appeals turned a deaf ear. Twenty-five pounds or no business done. That was his alpha and omega!

"Well, will you give me a few moments before I decide, in which to consult my wife?" at last said the druggist.

"Certainly," replied the other, jingling his money, "and when you come back you might bring me a pen and some ink, for I left my fountain pen at home."

John Stirling went into the pharmacy and gazed moodily at the show bottles. The suggestion that he should consult his wife was but a ruse to gain a little time. He knew she left the whole matter entirely in his hands. There seemed no way out of the difficulty, except to sign the promissory note and engage to pay an extortionate sum as interest. And then his gaze encountered the shelves of his small laboratory, and an idea entered his mind of such suggestiveness and brilliance that he fairly staggered.

"Good!" he said, "I think that can be worked! It is rather smart on my part, but it is a case of 'diamond cut diamond,' and I rather think our blood-sucking friend is about to have a much-needed lesson."

Picking up his inkpot, he emptied the contents. Carefully washing, he filled it up with a black fluid—one of the "sympathetic" inks he had used in his student days—and which, unlike most, was black when wet or damp, but quite colorless when dry.

Returning to the money-lender he announced that he was prepared—seeing he had no other alternative—to sign the promissory note, according to the terms proposed.

Mr. Ready-cash smiled a knowing and not pleasant smile. Using the pen and ink supplied, he drew up the document, which the druggist signed.

"And now," said the financier, folding up the document and putting it into an envelope after pressing the blotting-paper on it, "nothing more remains but for me to hand you the fifty pounds in gold, deducting the usual pound for out-of-pocket expenses in coming down here."

A sharp protest was on the other's tongue, but he swallowed it, and showing his visitor out he went back into the house to find his wife and acquaint her with what he had done.

* * *

One day, a few weeks after these events, Mr. Ready-cash sat in his office, in a thoughtful mood. Business lately had been prospering. Many visits had he paid to clients in need of his services and in every case he had exchanged coin of the realm for stamped paper.

"By the bye," he soliloquized, "the first payment of Stirling's is almost due. I must keep him strictly up to time. I'll just refresh my memory as to the exact date."

He opened his safe and took from it a bundle of envelopes, each of which contained a promissory note, the names and amounts being docketed on the outside, with the date and other particulars.

"Here we are—Stirling, £50." He had not looked at the document since the druggist had signed it, but when he out of curiosity extracted it from the envelope, his eyes grew large with surprise as he saw it was a perfectly blank piece of paper but for the red official stamp!

"Strange," he muttered, "I must have put it among my stock of unused notes and taken this instead."

He searched through all his stamped papers, he ransacked the safe, he turned out the drawers of his writing table, but no note signed "John Stirling" did he find.

Again he scrutinized the blank note, and then discovered in a corner a faintly pencilled figure "3," which he distinctly remembered noticing when the druggist signed it.

The agreement then *had* been drawn upon it; there remained the question, "Where was it now?"

To say that Mr. Ready-cash was startled is a mild way of stating the case. He was very seriously alarmed, and soon came to the conclusion that his best method would be to go down to Barkington and interview the druggist. He ruefully admitted to himself that he was anything but master of the situation, but trusted that "bounce"—an art in which he was an expert—would carry him through.

He found a very different John Stirling to the one he had seen on his last visit. The druggist was brisk, bland and smiling, and about the house and pharmacy were signs of prosperity not evident before.

"Well, Mr. Ready-cash," said he, "my first installment is not yet due; why have you honored me with this visit?"

The money-lender produced the blank note, and keeping tight hold of it by one corner, extended it in the direction of the other.

"That's my reason," he said, "I want to know how it is the writing on this has vanished? Don't think, sir, you are going to swindle me. Unless you can give some satisfactory reason for this, it will be very much the worse for you, I can assure you."

His temper was rapidly rising, but the druggist, with an amused smile upon his face, calmly examined the paper.

"Yes," he said at last, "a very satisfactory experiment. Do you know, Mr. Ready-cash, this blank piece of paper conclusively proves the soundness of a new hypothesis I have evolved with regard to the atomic theory?"

The financier attempted to say something, but his rage made him inarticulate. His mouth opened and shut, but before he could get a word in the other continued:

"But there, I don't suppose the atomic theory interests you just at present. What you *are* anxious to know is how to restore the writing upon that piece of paper. Now just listen to me and I will give you the case packed small. I wanted to borrow fifty pounds and was willing to pay a reasonable interest upon the sum. You came down. You were quite satisfied with my security and realized that you ran no ultimate risk in the matter. But you also knew I was hard up and that I must have ready money, and so you insisted upon an interest that was most exorbitant and extortionate. Can you wonder that I tried to circumvent you?

"As you may imagine, I have a pretty fair knowledge of chemistry, and as I stood in my shop the day you came, the idea suggested itself that you should use an ink for your promissory note similar to one my wife and myself used in our correspondence before we were married. This has, as you see, the peculiar property of vanishing when quite dry, but it can easily be restored by sponging or dampening with a certain liquid. An underhand trick, I hear you say? Probably it was, but when one has to fight men of your caliber, the weapons are not always of the best, don't you know!"

It was not likely Mr. Ready-cash would listen to this explanation quietly. He broke in upon it by loudly demanding his rights; talking wildly about the law; used threats and oaths alternately.

"Now don't upset yourself too much," pursued the druggist, "and very likely bring on an attack of angina pectoris, or some other heart trouble, but just listen to me. You talk about your rights and the law, but who is going to prove that I ever had the money at all? Eh, tell me that! You paid me in *gold; that* cannot be traced like notes or a check. Suppose I deny that I borrowed the money from you, as I easily could; what means have you of proving it?

"You may thank your stars you have to do with an honest man. I confess that when I gave you that special ink, my intention was to use it as a lever with which to extract fairer and more reasonable terms from you. But since then, I am glad to say, an uncle has died and left me a legacy; so I can settle the matter right up here and now.

"I am going to pay you fifty pounds, plus fifty shillings, which is still rather over 60 per cent interest per annum, and should satisfy

any one—even a money-lender. Now will you take it in notes or gold?"

"Gold," said Mr. Ready-cash, sullenly; "I wouldn't trust even a bank note from this place now!"

"As you like," cheerfully replied the druggist, counting out the sum specified, "and if you will hand me over that piece of stamped paper, we shall then be quits.

"Thank you; and as the matter is now amicably settled between us, perhaps you would like to see how easily the ink upon this can be restored to its pristine blackness.

"You see I simply moisten it with a piece of damp blotting-paper, and there it is! Now don't glare like that! It's too late now. But what a pity your knowledge of chemistry is not equal to that of finance. And now one word before we part. Another time don't forget your fountain pen!"

"MY BEST PAYING SIDE-LINE."

The Fourth of a Series of Articles by Different Druggists, in which Each Tells What Class of Goods has Paid Him Best—Strange to Say, Automobile Supplies Are the Source of Profit this Time.

By E. H. ROUSE,
Orange, Va.

I have found a very profitable side-line in automobile supplies. They pay a nice profit and at the same time you have no large amount of money invested.

This is a small town of less than one thousand inhabitants, and the store is situated on a corner that has to be passed by every tourist taking the historic old stage route in traveling from Washington to Richmond or Richmond to Washington. There are probably a dozen cars of various makes in and around town, and as no one in the town carried auto supplies we decided to put in a small line.

E. H. Rouse.

HOW THEY STARTED.

Our first order consisted of only the most necessary articles, such as spark plugs, patches, cement, batteries, battery connectors, tire tape, etc.; also gasoline, oil, and grease.

After a few weeks, when the local trade had become accustomed to coming to us for supplies, we began to increase our stock and to carry a more complete line, such as blow-out patches, tire covers, bumpers, brake bands, lining, valve lifters, valve fittings, tube bags, pumps, gaskets, washers, burners, horn bulbs, amaters, tire gouges, chains, waste, and various other small fittings to enable the tourist to make quick repairs and replenish his stock of supplies.

We next took up several special agency propositions as follows: Prest-O-Lite gas tanks and supplies, tires, and electric horns.

The Prest-O-Lite gas-tank agency can be secured by making a cash deposit of six dollars on each tank kept in stock, from four to six being sufficient to handle the exchange business for about a dozen cars. These tanks sell complete for eighteen, twenty-five, and thirty-five dollars, paying a profit of fifty per cent or better.

There is then a continuous profit from the exchange. You simply exchange tanks, tak-

ing the customer's empty tank and giving him a full one, charging for the gas it contains. The price is usually governed by that in the city nearest you, which is usually sufficient to pay a good profit. We usually hold the empties till we have two or three, and then ship them back to the nearest supply station, receiving refilled tanks in return.

By this arrangement the customer never has a worn-out tank, and never has to buy a new one, for it matters not what condition the tank is in when he returns it, he gets one in exchange that is in perfect condition.

In regard to tires we have the agency for Goodyear and Diamond. But before getting a tire agency I would advise to inquire of the various car owners which tire they prefer, and then get the agency for the two or three brands most generally used. I would advise the same policy in regard to spark plugs. While the percentage of profit on tires is not so large as on other accessories, yet the profit on an average pair of tires ranges from ten to fifteen dollars. Not at all bad considering the fact that we have no money invested, and no stock to carry, as we sell tires only on special order.

We carry the Newtone electric horns, as they consume only half the amount of current that most of the horns do, and also cost less; they sell for only twenty dollars, and give practically the same sound as the Klaxon, which sells for thirty-five.

SUPPLYING.

It is also to the advantage of those who handle supplies to have agency membership in the Tourists' Club of America. If you join you will be listed in their year-book as a depot for supplies. They furnish a large shield, bearing the Club's emblem, to hang in front of your building, to show tourists that you carry automobile supplies. Then all members going to the home office for routes through any part of the country will be given a regular drawn-up route showing the places where supplies can be secured, and should the trip lead them through your town, your store will be given as the place to stop for gasoline, oil, and grease, also for repairs. And after a tourist is once supplied by you with reliable goods, you may be sure that he will give you another call when in your vicinity. For the traveler likes to know where he can be supplied, and will not look for a new place when passing that way again.

In regard to buying supplies, we deal with several supply houses most convenient to us, buying our general line from them with the exception of goggles. These we obtain from the American Standard Thermometer Co. We find that they make the best line, also have better prices than the supply houses have.

Now after reading thus far, and without looking into the matter, you may conclude that it is a line too extensive for the average druggist to put in, but I assure you that such is not the case. For by buying in moderate quantities you will find that you can carry a nice assortment for about one hundred dollars. In fact, some supply houses will give you a nice show-case with a hundred dollar assortment.

THE PROFIT.

The profit on the general line runs from fifty to over one hundred per cent, and the number of times your stock is turned in a year depends entirely upon the management, as it does on every other line you sell. You must of course know your goods to sell them.

There are few tourists who pass our store without stopping to make inquiries as to routes and road conditions, on which subjects we try to keep posted.

Others who know their routes stop for cool drinks. And by keeping the auto supply case in a prominent place near the front of the store, where it easily attracts the eye of the traveler, we usually make a sale large or small before they leave the store. The man is not born who remembers every necessity when packing for an extended tour.

Finally, while we realize that all stores are not so well situated to handle the tourist trade, yet any drug store can have the local business and will necessarily get some of the traveling patronage.

DOLLAR IDEAS

A MOVABLE SEAT.

J. Wilber Tudor, Homer, Ill.: I submit a photograph of a "strength saver" employed in the store where I work. The illustration tells the story better than words. We believe in making conditions pleasant for all kinds of work, humble or not, and have evolved this idea.

The device is simply an old castoria box mounted upon small wheels such as the children have on their roller skates. The wheels cost us five cents each; the screws holding them to the box also cost five cents, making

the whole affair cost a quarter plus our work in assembling it. The materials can be purchased at any hardware store.

Since making this one we have seen similar wheels with rubber tires. For finer floors these might be better, but we would prefer the iron wheels without tires.

We find plenty of uses for the device. It is a wonderful saver of back and leg muscles when cleaning the sides and end of our floor cases. Other uses may readily be found, too, depending upon the demands of the user.

ORANGE RICKEY: A GOOD SODA DRINK.

J. C. Arthur St. James, Fort Morgan, Colorado: For the last few soda seasons I have had splendid success with a drink made with fresh limes and orange syrup. I call it Orange Rickey and sell it for 5 cents. It is made as follows:

An ounce of orange syrup is freshly prepared from the grated peel and juice. You can't buy it. Squeeze out a half or a whole lime as you prefer. A half is really enough, and be sure to add the squeezed lime, too. Next add a scoop of chipped ice to the lime and orange and fill the glass with carbonated water. Serve with a straw.

The name, of course, is a nickname, borrowed from the other famous rickey, and was first served in a New York store in 1898. There have been many fountain rickey drinks concocted, but this is the original soda drink to which the name is applied.

No other flavor blends with the fresh lime as does a good fresh orange syrup. Until late years it has been impossible to get the fresh fruit at a reasonable price in interior towns, but a firm in Texas and others in Arkansas fill orders for as many hundred per week as are needed at the year-round price of 60 cents a basket, averaging some 120 to the basket. Express is not high and the fruit is shipped quickly from its source, Old Mexico. Recent clinical tests prove lime juice of great value in typhoid. And we must not forget the "Lime Juicers" of Captain Marryat's stories where each English ship serves a certain ration of lime juice in the tropics to prevent scurvy. For an all-round, healthy, cooling summer drink, it's a winner. A special scissors-shaped squeezer is listed by fountain supply houses for limes.

TO SEE WHETHER A BOTTLE IN A CARTON IS BROKEN OR NOT.

N. E. Truman, Bainbridge, N. Y.: Manufacturers often put bottles of liquid medicine up in sealed cartons. When a package of this kind is received with its outer cover damp but unbroken, the retailer has the problem of determining the exact nature of the damage. The injury may consist of a broken bottle or loosened cork, with the resulting loss of contents, or it way be merely superficial—*i.e.,* liquid may be spilled on the carton from some external source. In the latter case, to break open the carton would in some instances render the package unsalable.

A simple method of finding the nature of the damage is to balance the package against another uninjured one of the same kind of goods. If the damp carton is the heavier, the damage is superficial and the contents intact. If it is of equal weight or lighter, some of the contents of the enclosed bottle has been spilled.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

IS IT ANY WONDER?

To the Editors:

This is a sample page of the expense account of a certain druggist who shall be nameless:

2. Exp. 35c, Adv. $2.50, *Fount 60c*	$ 3 45
3. Sal. $62.50, Sal. $30.00	92 50
4. Ice $16.00, Frt. $1.47	17 47
Stamps $1.25, Exp. 15c	1 40
5. Adv. $15.25, Tel. $5.00	20 25
6. Light $4.50, *Ice Cream $19.00*	23 50
7. Plumbing 50c, Laundry $1.05	1 55
8. *Fount 55c,* Exp. $1.20	1 75
9. Sal. $20.60, *Fount 15c*	20 75
10. Stamps $2.10, El. Light $10.65	12 75
11. Rent $60.00, *Gasoline $3.00*	63 00
12. *Manola 75c,* Freight $1.20	1 95
14. *Fount $1.05,* Freight $1.40	2 45
15. *Salt $1.20,* Freight 45c	1 65
16. Sal. $92.50, Exp. 85c	93 35
17. Express $3.30, *Gasoline $4.50*	8 80
18. Laundry 75c, Freight 40c	1 15
19. *Fountain $1.85,* Exp. 65c	2 50
20. *Fountain 40c*	40

Let me call your attention particularly to the italicized items. The fountain charges were for such things as lemons and crackers. The gasoline mentioned was sold to a doctor for his automobile. These are only a few things which this man charges to the expense account, and then he wonders why it is so large!

Nice way to keep business records, isn't it?

THE CLERK.

AN ADVERTISING SUGGESTION.

To the Editors:

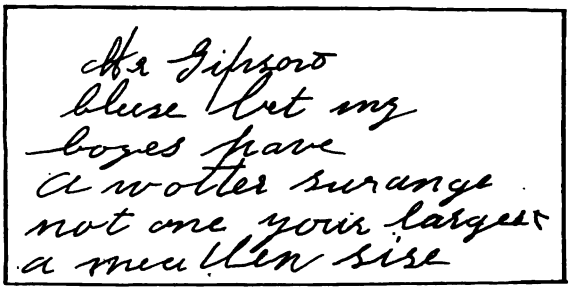
Here is an idea which may help druggists sell books, and, by the way, there might be quite a lot of money in books as a side-line if the druggist chooses wisely and advertises judiciously. Passing a well-known book store in New York recently, I noticed a very peculiar contrivance in the window. Upon a closer examination I saw that it was a sort of sheet-iron affair bolted and riveted together. Plainly it was some kind of a machine. My curiosity was aroused. On the contrivance was a neatly painted placard announcing: "This is John Rawn's machine with which he was going to make millions for himself at the expense of the public." Piled high around the "machine" were copies of a book entitled "John Rawn." Some of these days I am going to find out what kind of a scheme John Rawn had in view. Anyway, the idea suggests that a handy druggist, his local tinsmith, or carpenter might arrange many window displays which through originality, appropriateness, and singularity would attract attention and sell goods.

New York City. INKERMAN BAILEY.

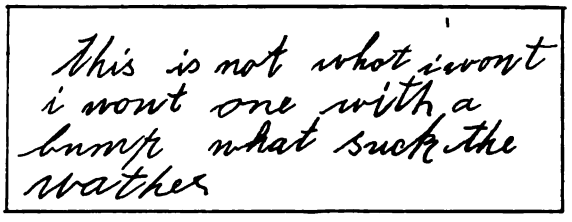
HE KNEW WHAT HE WANTED!

To the Editors:

Here is one of the experiences we had last Easter. We were first handed this letter:



We filled this order by supplying a two-quart fountain syringe. Later in the day the syringe was returned with the following note:



Accordingly I selected the best syringe in the shop with a fine large "bump" in the middle of it, and sent it on its way rejoicing!

Oh, I nearly forgot to mention it, but I want to say that I take the BULLETIN and am likely to be a subscriber as long as I am a druggist!

Bangs, Texas. J. C. GIBSON.

SUN CHOLERA MIXTURE.

To the Editors:

On page 130 of the March issue of the BULLETIN OF PHARMACY I notice that "A. H. F." wishes the formula of the old "Sun Cholera Mixture." An uncle of mine was one of the physicians to suggest the formula, but I always believed it to be named from the *Baltimore Sun,* a paper edited by A. S. Abell.

I supposed, too, that it originated in the South. But perhaps I have been misinformed. At all events, I submit a copy of the formula as I received it from my relative and trust you will print it for the benefit of "A. H. F." and others:

Tincture of capsicum	1 fluidounce.
Tincture of opium	1 fluidounce.
Tincture of rhubarb	1 fluidounce.
Essence of peppermint	1 fluidounce.
Spirit of camphor	1 fluidounce.

Mix well.

Dose: 15 to 20 drops in wineglass of hot or cold water. Repeat every 15 or 20 minutes if desired.

Stamford, Ct. MRS. L. B. GAYLOR.

AN AMUSING PRESCRIPTION.

To the Editors:

Here is a prescription which we received a short time ago:

Glycerin	1 ounce.
Bay rum	½ pint.
Marlax or malrax	1 ounce.
Alcohol	½ pint.
Pharmacopœia	½ ounce.
Castor oil	½ ounce.

If it isn't to much trouble git the above.

One or two of the ingredients rather amused the men in the store.

RED CROSS DRUG STORE.

Chatham, Ontario.

"THE CROWNING OF THE HOUSE."

To the Editors:

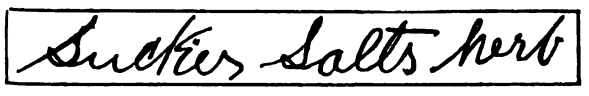
I certainly think, as I have written you before, that the BULLETIN OF PHARMACY has grown better every year since its origin. From Palmer to Oldberg to Helfman to Mason has been just one continued, endless chain of improvement, until now it has reached "Le coronation du Maison," as Napoleon III. said—with apologies to the spelling of "Maison!"

Chicago, Ill. W. BODEMANN.

THE ENGLISH LANGUAGE.

To the Editors:

Here is a man who wanted succus alterans.



His method of spelling it certainly ought to make him famous! Don't you think so?

THE ROBINSON DRUG CO.

Colorado Springs, Colo.

FLORAL DEPARTMENT.

Please find enclosed my subscription for the current year. I fancy this is the sixth I have sent you, and in doing so I would like to express my appreciation of your paper as I do not know of a better one.

S. B. BROWNELL.

Newtown, Hobart, Tasmania.

It is without doubt the best of its kind I have ever seen, and any druggist is making a mistake who does not take the BULLETIN OF PHARMACY. As for me I never intend to miss another copy.

GLENN C. STURDIVANT.

Senatobia, Mississippi.

Yes, I want the BULLETIN. You send it on till I tell you not to, and see that you get the dollars. I find it excellent reading, and it lets one see what is going on outside these Islands of ours. FRED WALKER.

Castle Douglas, Scotland.

I get more useful information, and entertainment as well, from the BULLETIN than I do from several other magazines put together.

Dallas, Texas. CORNELIUS BEUKA.

Your journal contains more valuable information for the clerk and proprietor than any other published.

Charlotte, N. C. NEWMAN A. SMITH.

I get more ideas from your journal than from any other which comes to the store.

Gilliam, Mo. W. H. LAND.

Here goes my one dollar bill, which pays for the best drug journal I have ever read!

Chunkey, Miss. G. E. THRASH.

I take half a dozen journals, but yours is decidedly the best. E. D. HEINE.

Vernon, Texas.

The BULLETIN is the snappiest pharmacy journal published! JAMES L. TUOHY.

Salem, N. J.

THE SODA FOUNTAIN.

SELECTED FORMULAS.

CHOCOLATE FOOD.

Fill an 8-ounce bell glass two-thirds full of vanilla ice cream; then add ½ ounce of chocolate syrup and one teaspoonful of Horlick's malted milk; stir until thoroughly mixed. Sells for 15 cents.

SPA FIZZ.

Orange syrup, 1 ounce; strawberry syrup, 1 ounce; juice of lemon; cracked ice, ¼th glassful; put into a glass; shake and fill with carbonated water, coarse stream. Decorate with fruit.

BANANA SPLIT.

A split banana is still selling well as the base of fancy sundaes. There is a good reason, for the banana sundae is certainly delicious when properly prepared. Especially is this true when the bananas are fully ripe and mellow. If you want your bananas to be in good condition, keep them in a dark, cool place. Here is a combination that is excellent, and to contrast it from your others, call it

"BANANA BEST."

On a split banana put a No. 20 cone each of vanilla ice cream, orange water ice, and strawberry ice cream in the order mentioned. Over the vanilla cream pour some chocolate flavor Velvet marshmallow dressing. Over the strawberry ice cream pour a small ladle of "Liquid" crushed pineapple. Top each cone with a cherry. Put a green cherry on each end cone, and a red cherry on the center cone. If you have no green cherries, use all red ones. Then decorate with whipped cream or Velvet marshmallow so that it will look artistic.

CHOCOLATE ECLAIR.

Have you ever tried serving them at your fountain? They can be served in a number of ways, and will be found good sellers. The empty eclair shells can be purchased from any wholesale baker. Take one of the shells and cut it so that the top lifts like a lid. Put two No. 20 mounds of vanilla ice cream into the shell, and spread out with a spoon so that the bottom is covered. Place the eclair on a small platter or other oblong dish, and pour over it a ladle of heavy chocolate syrup, or chocolate marshmallow dressing. This can be sold for 10 cents at a good profit. A better plan, where you can secure 15 cents for them, is to fill the shell with a parfait mixture. This is prepared by putting a No. 10 cone of ice cream into a mixing glass and adding a ladle of whipped cream or Velvet marshmallow cream and mix them thoroughly. Cover the shell with chocolate syrup as above. Another method is to make a filling by mixing chocolate ice cream and whipped cream, and then covering the eclair with whipped cream or Velvet marshmallow cream in place of the chocolate syrup.

The eclair shell may be filled with whipped cream or Velvet marshmallow cream and then a small quantity of chocolate syrup or chocolate marshmallow dressing. This is especially nice to serve with hot chocolate. After a little practice these can be prepared quite quickly.

MOORISH MILK SHERBET.

Into a mixing glass draw one-half ounce each of strawberry, vanilla and pineapple syrup. Add one-quarter glass of ice and fill with milk. Shake thoroughly and strain into a twelve-ounce glass.

YARBA CHOCOLATE.

Into a mixing glass draw one ounce of chocolate syrup, one-half ounce of orange syrup and two ounces of sweet cream. Add one-quarter glass of fine ice and fill with milk. Shake thoroughly and strain into a twelve-ounce glass.

SOUTHERN FRAPPE.

In a mixing glass draw one ounce of chocolate syrup, one-half ounce of coffee syrup, add one-half ounce of raspberry juice and one-quarter glass of fine ice. Fill with milk, shake thoroughly and strain into a twelve-ounce glass.

YUM-YUM SHAKE.

In a mixing glass draw one ounce of cherry syrup, one-half ounce of orange syrup, add a number twelve scoop of vanilla ice cream and fill with milk. Shake thoroughly and pour into a twelve-ounce glass without straining.

CHOCOLATE BOUCHE OR BOUSSHEA.

Into a mixing glass draw two and one-half ounces of hot chocolate syrup, add one-quarter glass of fine shaved ice, fill with milk, shake and strain into a twelve-ounce glass and top with whipped cream.

COFFEE BOUCHE.

Pour one and one-half ounces of coffee extract into a mixing glass, add one ounce of simple syrup or two teaspoonfuls of sugar and shake thoroughly, then strain into a twelve-ounce glass and top with nutmeg.

FAIRBANKS V. P.

Into a mixing glass draw one ounce of grape syrup and one-half ounce of raspberry syrup, add one-quarter glass of fine ice and fill with milk. Shake and strain into a twelve-ounce glass and top with nutmeg.

BON BON.

Into a mixing glass draw one-half ounce each of pineapple, strawberry, and vanilla syrup, add a portion of ice cream and fill with milk. Shake thoroughly and pour without straining into a twelve-ounce glass.

MIXED FRUIT SHAKE.

Into a mixing glass put a small ladle of crushed pineapple, one of crushed cherry and one of crushed strawberry, and fill with ice cold milk and shake thoroughly, then pour into a twelve-ounce glass. It is very nice with a portion of ice cream floated on top.

SOUTHERN MILK SHAKE.

Into a mixing glass draw three-quarters of an ounce each of pineapple and vanilla syrup. Add one-quarter glass of fine ice and fill with milk. Shake, strain into a twelve-ounce glass and sprinkle with powdered cinnamon.

MINERAL MILK.

Into an eight-ounce glass draw three ounces of any mineral water and fill with milk and mix.

SELTZER AND MILK.

Into an eight-ounce glass draw four ounces of seltzer and fill with milk and mix.

VICHY AND MILK.

Into an eight-ounce glass draw four ounces of vichy and fill with milk and mix. This is a good morning drink.

QUEEN SHERBET SYRUP.

To two pints of pineapple syrup add two pints of vanilla syrup and two pints of strawberry syrup, and mix thoroughly.

SPECIALS FOR THE SODA FOUNTAIN.

George Galane, employed in Menk's pharmacy, Newark, writes interestingly in *The Soda Fountain* of his work as soda dispenser. In a recent issue of that journal he said:

"At present I am having my spring opening, wherein I display a notable assortment of fresh fruits, bananas, strawberries, pineapples, oranges, etc., of the best quality procurable. Then, pasted on the large back mirrors of the fountain, the windows, and the doors leading from the street to the fountain I have many sign strips telling what we have and what we do. We believe in signs here so people will know just what we have to offer in the way of quality, service, and goods. And, in passing, I might say that we treat all customers alike, so that every patron is satisfied. We insist upon cleanliness, order, and neat appearance of everything about the fountain.

"Now, I have two specials every week which are being called for every day in the week. The specials this week are:

"*Strawberry Sponge*—sponge cake, fresh strawberries, ice cream and whipped cream, a winner at 15 cents; and

"*Fresh Fruit Salad Sundae*—fresh bananas, cut; strawberries, orange and cherries, chopped and mixed. This is a good seller at 10 cents.

"I would like to tell you and my brother dispensers of something that happened to me recently. A man came in to me at the soda fountain and asked for something with 'steam behind it.' I gave him an egg malted milk. He asked the name of the drink. I told him 'egg chocolate malted milk,' and he expressed his appreciation of it. Then I gave him a 15-cent check. 'I reckon you have made a mistake and have given me the wrong check,' said he. I told him the price was 15 cents, to which he replied, 'I can buy a small steak and a cup of coffee for that money.'

"He then said it was a dodge of the 'city folks' in trying to rob him, and turned to go. Seeing the bananas, pineapples, oranges, etc., with which the fountain was decorated he asked what I did with them, or if the store was a fruit store. I explained why and how we used them, and then he 'reckoned we did not have any meat.'

"'Oh, yes we have,' I answered, and produced a large ham from which I had been cutting slices for sandwiches—and he almost collapsed. Then he shook hands and said, "The next time I come I'll buy another drink."

HOMOGENIZED CREAM.

"Homogenized cream," says the *International Confectioner*, "is rapidly taking its place in the ice-cream trade. It is put through the homogenizer, a machine that breaks up the globules in the cream, giving it a thicker consistency, without the addition of a filler or any substance whatever. Merely the structure of the cream is altered. It is impossible to churn the cream, hence no butter will appear in the ice cream. From the view-point of economy, it is much more reasonable in price than the raw cream of the same consistency, though not as rich in butter-fat, yet it is a fact that if a large amount of butter-fat is present in ice cream it is not as digestible as when made with a comparatively small butter-fat content. Ice cream can be "too rich." But the consumer thinks it is caused by too much sugar, when the richness is directly due to the cream, not the flavoring. It will pay those who do an extensive ice-cream business to look into the merits of this new product. By it the consistency of 40-per-cent cream can be produced from 20-per-cent cream. Like all innovations it requires time to introduce it, though in Europe it is well known.

"Two ice-cream formulas for vanilla, each giving 10 gallons, the proportion of milk and cream being the only difference:

Five and one-quarter pounds sugar.
Ten quarts cream (40 per cent).
Eight quarts milk.
Two quarts condensed milk.
Four ounces gelatin.
Four fluidounces vanilla extract.

Five and one-quarter pounds sugar.
Sixteen quarts cream (20 per cent).
Four quarts condensed milk.
Four ounces gelatin.
Four ounces fluid vanilla extract."

CHIPPED GLASSWARE.

E. F. White, writing in *The Soda Fountain*, gives some pointed talk on the subject of chipped glassware. He says:

"Because glasses represent a considerable part of the general fountain expense, there is a tendency to continue to use a glass after the rim has become chipped. This is a good example of false economy. Insist that your dispensers be as careful as they can in handling glasses. Don't forget, however, that they chip very easily and no man can avoid some breakage. The only wise thing to do is to discard a glass just as soon as you notice that it is chipped. The appearance of such a glass upon the counter is decidedly bad. It is also dangerous, for some one is likely to cut himself, not seriously perhaps, but sufficiently to cause one to think twice before going a second time to a fountain where he had such an experience.

"Another dangerous thing about a chipped glass at a fountain is that your dispensers are liable to cut themselves when washing them, especially when they are hustling and trying to give good service. Don't let them run any unnecessary chances.

"Have you ever noticed the expression on a customer's face who was turning a chipped glass around

in a holder, trying to find a smooth edge to drink from? If you ever do, you will understand why this advice is given. It may cost something to discard chipped glasses; but it will cost more to keep them in service.

"It is not always necessary to throw them away—they can be used at home where a knowledge of their condition will mean carefulness. If you do not care to use them, you no doubt will find some among your clerks who will be glad to."

AN ATTRACTIVE SODA MENU.

R. L. McDonald, proprietor of the pharmacy in the Minahan Building, Green Bay, Wis., prints a soda menu for his fountain. On the cover appears the statement, "No soda like McDonald's. It changes a grouch to a grin." The cover pages are a heavy, brown stock. The inside pages are buff colored.

On the first page are mentioned the different crushed fruits and sundaes. The two inside pages read:

There is a treat in store for the unfortunates who have never tasted it. The flavor is inimitable.

JERSEY CREME - - - - - - - - - 5c

PHOSPHATES

Lemon 5c
Cherry 5c
Orange 5c
Lime 5c
Claret 5c
Egg 10c
Jersey Creme 5c

ICE CREAM SODA

As Cold as Charity

Chocolate 10c
Cherry 10c
Raspberry, 10c
Orange 10c
Maple 10c
Lemon 10c
Sarsaparilla 10c
Strawberry 10c
Jersey Creme 10c
Vanilla 10c

The Best, Cleanest and Purest Fountain Drinks in the City.

LEMONADES

Plain 10c
Egg 15c
Seltzer 10c
Claret 15c
Jersey Creme 15c
Grape Juice 15c

FRAPPES

Every woman suffragette votes that they are the most delicious flavors that ever tickled a feminine palate.

Chocolate 10c
Raspberry 10c
Maple 10c
Pineapple 10c
Strawberry 10c
Lemon 10c
Jersey Creme 10c
Sarsaparilla 10c

MISCELLANEOUS DRINKS

Grape Juice 10c
Root Beer 5c
Orangeade 5c
Iron Brew 5c
Jersey Creme 5c
Gingerale 5c
Coca Cola 5c

ALWAYS AN ASSORTMENT OF FRESH CANDIES

As the menu says, each drink is "made with that touch of loving care." Mr. McDonald bases the success of his fountain upon a superior quality of goods and prompt service.

TO IMPROVE CHOCOLATE CREAM.

Chocolate ice cream is smoother if the chocolate is boiled up with milk instead of making a syrup with water and boiling it in this. In the first place, the least water in ice cream, the better, for it serves no good purpose and has a tendency to cause coarseness besides lessening the keeping qualities. If well stirred with a wooden paddle the milk and chocolate may be boiled on an open fire; first bring the milk and sugar to a boil, set off the fire and add a dipperful of the milk to the chocolate, stirring to a thick, smooth paste; then add the rest of the milk gradually, always stirring, and when all is mixed place it back on the fire to boil a short while. If an all-cream ice cream is being made, use four quarts of the cream instead of milk, and if it threatens to separate add a pinch of bicarbonate of soda, which will prevent it. In all ice cream, any part of which is heated or boiled, that part should be thoroughly chilled before mixing with the rest of the batch, or before putting it in the machine, else there is sure to be butter in the finished batch.

HE WANTED A NAME FOR HIS SODA PRODUCT.

There is a druggist down in Madisonville, Ky., who got up a new soda concoction that he thought was pretty good, and he wanted to bring it to the attention of people. He therefore offered a prize for the best name for it. We suspect, however,

ONE EGG,
ONE BANANA,
ONE LADLE OF ICE CREAM,
MILK,
FLAVORING.

Whipped with an electric machine and nutmeg added.

Sounds good, doesn't it? It is good, and all for

10c.

—Try It—

But we haven't a name. Here's our offer:

To the one who suggests the catchiest name for this delicious egg drink we will give

$1.00

worth of Drink Checks.

SORY'S DRUG STORE

Madisonville, Ky.

that he didn't need help from the public so much in this particular as he wanted to get everybody talking about the drink. He thought a prize scheme was one of the best ways of getting people stirred up. Hence the accompanying ad. inserted in the local newspapers.

TWO NEW ONES.

CENTRAL PARK PHOSPHATE.

Into a ten-ounce glass draw one ounce of pineapple syrup, and three-fourths of an ounce of blood orange syrup. Add a couple of dashes of phosphate, and fill with carbonated water.

FRUITADE.

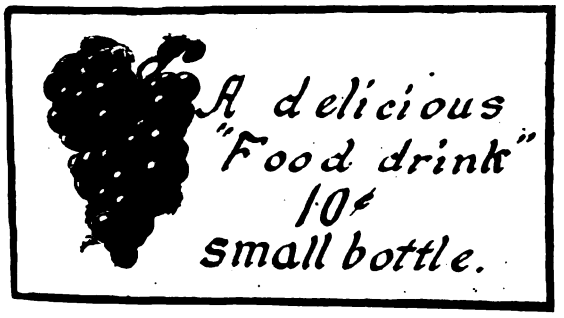
Into a twelve-ounce glass draw one and one-half ounces of pineapple syrup. Into this squeeze the juice of half a lemon, and one-half a small orange. Fill one-third full with fine ice, and the balance with carbonated water, mix and decorate with fruit. This may also be served with plain water.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Show-card Writing.—

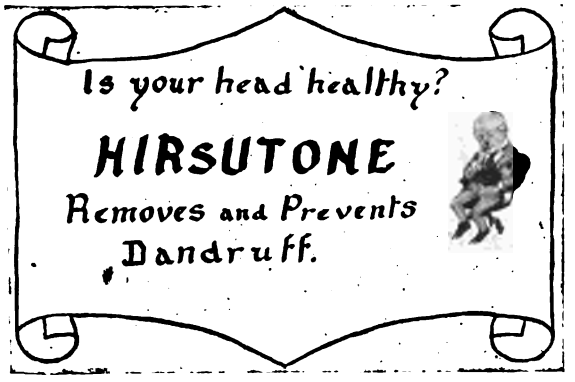
In the December BULLETIN, 1910, on page 504, Roy S. Warnack had a contribution telling how easy it was for even an amateur to make nice show cards. Moved by this article, W. H. Land, of Gilliam, Mo.,



One of Mr. Land's cards.

undertook to make a few signs. In the accompanying illustrations may be seen the fruits of his first effort.

The pictures used in these signs are cut-outs from magazines, an idea borrowed from the BULLETIN. Mr.



Another of Mr. Land's cards.

Land says that the cards, aside from inducing many sales, have given him a local reputation as a show-card writer. The inks are made after formulas suggested in this journal.

A Druggist's Clever Trade-mark.—

Otto Kurz is a successful druggist at 752 Michigan Avenue in this city. Notice the man's initials—O. K. He has been clever enough to take advertising advantage of this happy circumstance, and he calls his place the "O. K. Pharmacy." He also gets out an O. K. Cough Syrup, O. K. Headache Powders, O. K. Sarsaparilla, and a whole line of O. K. goods in general. Not bad, is it? Now he writes us that he has been reading the BULLETIN OF PHARMACY about ten years and that our journal is O. K.!

An Unusual Ad.—

J. W. Stutts, of Florence, Alabama, informs us that he was recently a candidate for public honors. Just after the primary election, and early in the campaign, he ran an ad. in the weekly papers: *"Vote for J. W. Stutts."* Of course, the voters were curious to know what this druggist could want of the voters. Mr. Stutts followed his announcement up by sending every voter and others in the county the following card:

VOTE FOR J. W. STUTTS

I hereby announce my candidacy for more business in 1912, subject to your patronage and influence. MY PLATFORM: The Purest and Best Drugs and Chemicals that hard cash will buy. The best of everything in our line—Heaping measure, Full weight, Prompt attention, Right prices, a Square deal. Won't you join hands with us on this platform and help us make 1912 a banner year? We are counting on you.

"Get the Habit"

J. W. STUTTS

[OVER]

The back read:

VOTE FOR J. W. STUTTS

"EAS-IT"

The Wonderful Headache Remedy

Guaranteed to cure any form of headache in thirty minutes or money refunded. No dope in it. Fill out coupon and present at our store for free sample bottle. Only a few left. Come quick.

Name .....

Address .....

[OVER]

This scheme not only proved a bit of good general advertising but helped the sales of "Eas-It" which Mr. Stutts was then putting on the market. Mr. Stutts received many compliments on this little plan and recommends it to others who may care to try it.

DURING a recent epidemic of spinal meningitis in Dallas, Secretary Paul Casey of the Health Department went with a sanitary inspector to raise the quarantine on a negro shack and remove the big green sign.

An old negro came to the door.

"Now sholy, boss, you'all ain't gwine ter take that sign down?" he asked.

"Yes, we are going to remove the quarantine," said Casey. "Don't you want it removed?"

"No, sah, boss, 'cause dar ain't been nary collectah 'round heah sense dat sign was put up."

The quarantine remained.—*Houston Post.*

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Chewing Gums.

A. B.—The making of chewing gums is by no means the simple operation which it seems to be. Much experience in manipulation is necessary to succeed, and the published formulas can at best serve as a guide rather than as something to be absolutely and blindly followed. Thus, if the mass is either too hard or soft, change the proportions until it is right; often it will be found that different purchases of the same article will vary in their characteristics when worked up.

Chicle gum is purified by boiling with water and separating the foreign matter. Flavorings, pepsin, sugar, etc., are worked in under pressure by suitable machinery. Formulas:

(1)
Gum chicle	1 pound.
Sugar	2 pounds.
Glucose	1 pound.
Caramel butter	1 pound.

First mash and soften the gum at a gentle heat. Place the sugar and glucose in a small copper pan; add enough water to dissolve the sugar; set the mixture on a fire and cook to 244° F.; lift off the fire; add the caramel butter and lastly the gum; mix well into a smooth paste; roll out on a smooth marble, dusting with finely powdered sugar, run through sizing machine to the proper thickness, cut into strips, and again into thin slices.

(2)
Chicle	6 ounces.
Paraffin	2 ounces.
Balsam of tolu	2 drachms.
Balsam of Peru	1 drachm.
Sugar	20 ounces.
Glucose	8 ounces.
Water	6 ounces.
Flavoring, enough.	

Triturate the chicle and balsams in water; take out and add the paraffin, first heated. Boil the sugar, glucose, and water together to what is known to confectioners as "crack" heat, pour the syrup over the oil slab, and turn into the gum mixture, which will make it tough and plastic. Add any desired flavor.

(3)
Gum chicle	122 parts.
Paraffin	42 parts.
Balsam of tolu	4 parts.
Sugar	384 parts.
Water	48 parts.

Dissolve the sugar in the water by the aid of heat and pour the resultant syrup on an oiled slab. Melt the gum, balsam, and paraffin together and pour on top of the syrup, and work the whole up together.

(4)
Gum chicle	240 parts.
White wax	64 parts.
Sugar	640 parts.
Glucose	128 parts.
Water	192 parts.
Balsam of Peru	4 parts.
Flavoring matter, enough.	

Proceed as indicated in No. 2.

Polishing Cloths.

E. R. B. asks: "Can you give me a formula for making polishing cloth for cleaning silver, copper, brass, etc.?"

The so-called polishing cloths are made in different ways. The simplest is to dissolve 1 ounce of oxalic acid in a gallon of water, and sift into the solution one pound of whiting. Saturate pieces of Canton flannel, about 18 inches, in this liquid, which is to be kept well stirred, wring out the cloth somewhat, and allow it to dry. Then smooth out the cloth, fold it, and insert it in an envelope.

Another plan is to use a mixture of 2 parts of white Castile soap, 1 part of jeweler's rouge, and 20 parts of water. Dissolve the soap in the water by the aid of heat, adding water from time to time if necessary, and then incorporate the rouge. Impregnate pieces of woolen cloth, which may be red, in the same manner as the preceding. Instead of the cloth, chamois leather may be used, which will prove more durable for many purposes.

Sometimes two kinds of cloths are used in conjunction. The first is impregnated with a mixture of flour of emery 1 part, soap 2 parts, and water 10 parts; the second with a mixture of tripoli or jeweler's rouge 1 part, soap 2 parts, and water 10 parts. The first cloth is used as a scourer to remove the oxidized surface, while the second cloth is the polisher proper.

Restoring Automobile Tops.

B. R. wants a polish for automobile tops—presumably the rubber ones. We do not know the composition of such a preparation. Suppose you try a carriage top dressing. First try it experimentally on a small part of the auto top. Carriage tops that have faded and become gray can be restored by washing with a solution of:

Nutgalls	4 ounces.
Logwood	1 ounce.
Copperas	1 ounce.
Clean iron filings	1 ounce.
Sumach berries	1 ounce.

Put all but the iron filings and copperas in one quart of the best white wine vinegar, and heat nearly to the boiling point; then add the copperas and iron filings. Let them stand for twenty-four hours, and strain off the liquid; apply with a sponge. This is equally good for restoring black cloths.

To restore enamel leather carriage tops, first wash the top with soft water and Castile or crown soap to remove dust, dirt, etc., using a sponge, and then scrub with a moderately stiff brush, cleanse with clean water, and dry with chamois leather. Never apply any kind of oil or top dressing without first cleaning the leather.

An enamel for carriage tops is: Asphaltum, 150 parts; boiled linseed oil, 3 parts; turpentine, 33 parts; benzine, 20 parts. Melt the asphaltum in the oil and add the thinners.

Licorice Preparation for Quinine Mixtures.

G. J. C.—The following preparation is used for disguising the taste of quinine:

Select licorice root, cut and slightly bruised	2½ ounces av.
Water of ammonia	4 fluidrachms.
Glycerin	1 fluidounce.
Water	16 fluidounces.

Macerate for twenty-four hours, strain, boil for ten minutes, filter, and evaporate at gentle heat until reduced to six fluidounces.

Now add to this evaporated infusion:

Simple syrup	6 fluidounces.
Alcohol	4 fluidounces.
Spirit of orange	2 fluidrachms.
Oil of cinnamon (Ceylon)	2 drops.

No acid should be used with this preparation because it will dissolve the quinine and make its bitter

taste more perceptible, and at the same time liberate the glycyrrhizin from its combination with ammonia and render it insoluble, and therefore valueless for the purpose of disguising or modifying a bitter taste.

Shoe Polishes.

B. R.—Here are several formulas for shoe polish:

Marseilles soap	122 parts.
Potassium carbonate	61 parts.
Beeswax	500 parts.
Water	2000 parts.

Mix and boil together with occasional stirring until a smooth, homogeneous paste is obtained; then add, a little at a time, and under constant stirring, the following:

Rock candy powdered	153 parts.
Gum arabic, powdered	61 parts.
Ivory black	1000 parts.

Stir until homogeneous; then pour, while still hot, into boxes.

The following makes a very brilliant and durable black polish for shoes:

Boneblack	40 parts.
Sulphuric acid	10 parts.
Fish oil	10 parts.
Sodium carbonate crystal	18 parts.
Sugar, common brown, or molasses	20 parts.
Liquid glue, prepared as below	20 parts.
Water, sufficient.	

Soak 10 parts of good white glue in 40 parts of cold water for four hours, then dissolve by the application of gentle heat, and add 1.8 parts of glycerin (commercial). Set aside. Dissolve the sodium carbonate in sufficient water to make a cold saturated solution (about 3 parts of water at 60° F.), and set it aside. In an earthenware vessel moisten the boneblack with a very little water, and stirring it about with a stick, add the sulphuric acid, slowly. Agitate until a thick dough-like mass is obtained, then add and incorporate the fish oil. Any sort of animal oil, or even colza, will answer, but it is best to avoid high-smelling oils. Add a little at a time, and under vigorous stirring, sufficient of the saturated sodium carbonate solution to cause effervescence. Be careful not to add it so freely as to liquefy the mass. Stir until effervescence ceases, then add the molasses or sugar—the first if a soft, damp paste is desired, and the latter if a dryer one is wanted. Finally, add a little at a time, and under constant stirring, sufficient of the solution of glue to make a paste of the desired consistency. The exact amount of this last ingredient that is necessary must be learned by experience. It is a very important factor, as it gives the finished product a depth and brilliancy that it could not otherwise have, as well as a certain durability, in which most of the blackings now on the market are deficient.

PHARMACY FRATERNITY HOUSES.—The two engravings on this page represent chapter houses of the Kappa Phi Fraternity of the United States of America. This illustration shows the house of the Phi Chapter, which is located in the Department of Pharmacy of Northwestern University in Chicago. The Chapter house itself is to be found at 208 East Superior Street.

PHARMACY FRATERNITY HOUSES.—This is one of the rooms in the house of the Delta Chapter of the Kappa Phi Fraternity. The Delta Chapter is located in the Departments of Pharmacy and Medicine in the University of Maryland at Baltimore, and the Chapter house is at 1415 West Fayette Street. Both this cut and the other one were courteously loaned us by Dr. A. R. Bliss, Jr., editor of "The Mask," the official organ of the fraternity.

Tincture of Vanilla.

R. I. submits the following query: "Please publish a formula for tincture of vanilla or essence of vanilla that would be a good seller and at the same time meet the requirements of the food and drug laws."

If you wish to call the preparation "Tincture of Vanilla" you must follow the official formula given in the Pharmacopœia on page 484. If you care to supply a cheaper product, you can offer the compound tincture of vanillin of the National Formulary. Flavoring preparations containing vanillin and coumarin are legal if properly labeled. They may be sold as "vanillin extract" or "Vanilla Flavoring made from Chemically Pure Vanillin." The N. F. product may be called compound tincture or compound essence of vanillin, or vanillin flavoring, or some such title. Vanilla extract, by the government ruling, is the flavoring extract prepared from vanilla bean with or without sugar or glycerin, and containing in 100 Cc. the soluble matters from not less than 10 grammes of the vanilla bean.

Chicken Cholera Remedy.

T. B. K. wants a formula for a chicken cholera remedy. Here are several found in the literature:

(1)

Sulphuric acid	1 fluidounce.
Sulphate of iron	16 ounces.
Water	1 gallon.

Mix. Add 1 ounce of this mixture to a pint of water, and supply in place of water to drink. Or, mix with meal or other food.

(2) A remedy promulgated by the Department of Agriculture is alum alone, giving 3 or 4 teaspoonfuls of alum water daily, and mixing strong alum water with the feed (corn-meal). This is said to cure the very worst cases.

(3) The following remedy and treatment have been proposed:

Take of crystals of carbolic acid, 2 ounces; hyposulphite of soda, 2 ounces; dissolve them in 1 gallon of clean water; add of this solution 1 or 2 ounces to the gallon of water that the fowls drink, or mix it in the same proportion in a mash made of ground grain or other food. This not only relieves when sick, but is an excellent preventive.

Replying to your further request for the formula of a powder to be placed in drinking-water for white diarrhea in chickens, we suggest the use of powdered ferrous sulphate. Laudanum in doses of 5 to 10 drops for large birds is an efficient remedy for diarrhea in poultry. If the diarrhea be observed in its early stages it can usually be checked by feeding boiled rice with which is mixed a little chalk in fine powder.

Roach Powders.

Yornin.—"The Scientific American Cyclopedia of Formulas" says that borax is the best cockroach exterminator yet discovered. This troublesome insect has a peculiar aversion to the salt, and will never return where it has once been scattered. As it is perfectly harmless to human beings, it is much to be preferred for this purpose to the poisonous substances commonly used.

You can make a roach poison which is practically harmless to man by the following formula: Borax, 9 ounces; starch, 2½ ounces; cocoa, 1 ounce.

Another formula is: Corn-starch, 8 ounces; powdered sugar, 16 ounces; powdered quicklime, 4 ounces; powdered borax, 4 ounces. Have the ingredients thoroughly dry before mixing, and preserve in a tight box. Scatter where the insects frequent, or use with a powder blower. This is said to be quite efficient.

Horse Liniment.

J. R. C.—We do not know the composition of the proprietary preparation which you mention, but the following formulas have been suggested for a horse liniment:

(1)

Camphor	1 ounce av.
Carbolic acid	1 fluidounce.
Oil of origanum	2 fluidounces.
Oil of tar	2 fluidounces.
Crude petroleum	2 fluidounces.
Oil of turpentine	12 fluidounces.
Liquid petrolatum	12 fluidounces.
Benzine	16 fluidounces.

This is called White Oil Stock Liniment:

(2)

Eggs	2.
Green soap	1 ounce av.
Gum camphor	1 ounce av.
Ammonia water	1 fluidounce.
Alcohol	1 fluidounce.
Oil of origanum	1 fluidounce.
Oil of turpentine	8 fluidounces.
Water	8 fluidounces.

Mix the soap and water to a smooth paste, beat in the eggs, add the oils, and incorporate thoroughly. Dissolve the camphor in the alcohol and stir this into the previous mixture.

Soldering Block-tin Tubing in Fountains.

C. J. H. Co. write: "Please indicate the best method of soldering leaks in block-tin tubing in soda fountains."

We consulted a tinsmith, who advised the use of a low melting solder. The objection to ordinary solder is the necessity of using so much heat to fuse it that you melt a hole in the pipe in covering the leak. Merely heat the soldering iron sufficiently to melt the low-fluxing solder and then proceed to apply it. Of course the part about the leak should be scraped first and then brushed with a solution of zinc chloride, made by dissolving zinc in hydrochloric acid. Have an excess of the metal. Heat the soldering iron a little, rub it on the bar of lead, and then apply the solder to the leak. Low-melting solder can be obtained from Buhl Sons & Co., Detroit, or presumably from any wholesale hardware house.

A Prescription Open to Criticism.

R. I. writes: "We have a doctor who persists in writing for the following:

Bromidia	1 ounce.
Elixir of iron, quinine and strychnine	1 ounce.
Neoferrin, q. s.	4 ounces.

"Now in our opinion this is incompatible, although we have dispensed it several times and the patient is still among the living. But we nevertheless think that the chloral hydrate in the bromidia and the strychnine are physiologically opposed, and the potassium bromide and strychnine may form the insoluble strychnine bromide."

While we have not actually compounded this prescription to observe whether it precipitates, we do think it should be dispensed with a shake label. The strychnine may be thrown down by the soluble bromide present. Such a reaction is likely to take place. Physiologically, the chloral hydrate and strychnine are antagonistic, but that does not concern the druggist. If there is danger of the patient getting all the strychnine in the last teaspoonful, the dispenser should caution the customer to shake the mixture thoroughly before using. But any physiological incompatibility in the prescription concerns the doctor only.

Cold-water Paste for Wall-paper.

A. L. B. wants a formula for a "cold-water paste" for paperhangers.

To make a paste, take 2 pounds of fine flour, put it in a pail, add cold water, and stir it up together in a thick paste. Take a piece of alum about the size of a small chestnut, pound it fine, and throw it into the paste; mix well. Then provide about 6 quarts of boiling water, and mix while hot with the paste until the whole is brought to a proper consistency. This makes an excellent paste and fit for use when cold.

Short Answers.

S. B.—For information about the cultivation of poppy and the extraction of the opium on a commercial basis, write the Bureau of Plant Industry, Department of Agriculture, Washington, D. C. The Dispensatories tell something about the methods of collecting opium.

E. M. G.—Several formulas for greaseless cold cream were given by H. B. Molyneaux in an article on that subject on pages 106-110 of the BULLETIN for March, 1911. See annual indexes for other formulas.

G. J. C.—To prepare a soluble tar solution, follow the U. S. P. formula for syrup of tar, using only 50 grammes of sugar.

A. R. W.—We do not know the composition of the prescription proprietaries which you mention.

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THE MONTH'S HISTORY

THINGS ARE QUIET.

With the approach of midsummer heat, things seem to quiet down on the pharmaceutical Potomac. Nothing of importance has transpired during the last month. The stagnation may be due to the characteristic enervation of this season of the year, or it may arise from the fact that the energies of the nation have recently been concentrated in two channels only—baseball on the one hand, and the terrific Taft-Roosevelt feud on the other.

At any rate, whatever the cause, if it were not for the State associations, now meeting in annual convention here and there, there would be very little doing of interest to the drug trade. The recent contention over various food and drug bills in Washington has all died down, and the conviction seems to be deepening that nothing definite will be done at the present session of Congress. The hearings before the House Committee on Interstate Commerce finally resulted in the publication of a book of 511 pages—a book which nobody has taken the trouble to read. In Chicago, so far as the N. A. R. D. is concerned, we find the organization beginning an educational campaign for the purpose of convincing proprietors that they should adopt the new Freericks agency-coupon plan for the protection of prices. This is apparently the chief "issue" with the N. A. R. D. just at the present time. Mr. Freericks says that it would be in violation of the Sherman law and some of the State acts to bring any sort of compulsion to bear upon the proprietors. They must simply be argued with and of their own volition brought to adopt the plan because they consider it a wise one.

In the meantime arrangements are being made for the annual meetings of both the N. A. R. D. and the A. Ph. A. The N. A. R. D. convention will be held during the week of August 12 in Milwaukee, and the headquarters will be at the Hotel Pfister. The A. Ph. A. convention will be held the week immediately following, beginning August 19, at the Brown Palace Hotel in Denver. This arrangement is a very convenient one for those who desire to take in both meetings. The N. A. R. D. gatherings usually adjourn on Thursday afternoon or evening, so that the trip to Denver may be taken with leisurely comfort and in plenty of time for the opening general session of the A. Ph. A. on the following Monday afternoon at 3 o'clock. The appropriate committees of both associations have been busy for months in making preparations, and the two meetings will be full of interest.

* * *

THAT SENNA CASE.

We have intimated in the foregoing glance at the month's developments that nothing of startling interest has recently transpired. We might qualify this statement par-

tially by saying that more or less comment has been aroused by the decision of Judge Hand in the "broken senna" case in New York. The government brought proceedings against J. L. Hopkins & Co., the well-known importers of crude drugs, with reference to the shipment of a bale of senna leaves to San Francisco. The package was labeled "Alex. Senna Broken, U. S. P." The government declared that the bale was adulterated in that it contained stalks, stones, pebbles and other substances foreign to senna leaves, and this declaration was supported by the testimony of Dr. H. H. Rusby, Dr. Albert Schneider and Dr. Charles Chestnut.

Judge Hand, however, of the United States District Court for the Southern District of New York, finally took the case from the jury on the adulteration count and directed a verdict for the defendant. The Judge did not say that the shipment was all that it should have been. He did not pass on that question at all. His sole point was that in order to establish a case under the food and drugs act it must be shown in the language of the law that the shipment "differed from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopœia." He found that there was no standard laid down for senna except that it should be free from stalks. The testimony in the case had shown, however, that as a matter of fact senna was never entirely free from stalks, and the question therefore became a practical instead of a theoretical one. Under the circumstances he thought the pharmacopœial language could not be construed literally or absolutely.

The testimony in the case had shown, declared the Judge, that several grades of senna were recognized on the market—such as broken senna, senna siftings, and the like. In a certain loose way people who bought these grades knew what they were and wanted them. He felt quite sure that the particular bale in question should have been labeled senna siftings instead of broken senna, but he could not see that a standard for either was really established by the Pharmacopœia. Since criminal statutes must be construed strictly, he could not feel that he had the right under the circumstances to so strain the pharmacopœial standard as to make it apply in this case. The defendant was therefore exonerated. On the misbranding count the case went to the jury, and the jury also rendered a decision for the defendant.

The case has attracted a good deal of attention and has among other things been discussed very freely in some of the New York papers. Dr. Rusby has been inclined to criticize Judge Hand severely, but has since confessed that he misread the Judge's decision. His first supposition was that the Judge had held for the defendant because the package was labeled "Alex. Senna Broken" instead of plain "Senna," and because therefore it did not bear a pharmaceutical title and was consequently not subject to the pharmacopœial requirements. This supposition was erroneous, as Judge Hand subsequently declared in the newspapers.

* * *

THE PREREQUISITE WINS IN ILLINOIS!

Certainly this is a year of surprises, political and otherwise. For a long time the chief oracle against the graduation prerequisite has been located in Chicago. We refer, of course, to our able contemporary, the *Western Druggist*. In truly T. R. style, the W. D. has thundered month after month against the prerequisite, and we have all been told with great regularity that nobody wanted it, that it would do more harm than good, that it was simply a scheme of the schools to benefit themselves, and that it was subversive of every last principle of a democratic government.

You would naturally expect, wouldn't you, that under such circumstances, and following such leadership, the druggists of Illinois would be united against the graduation prerequisite? But, alas! this is the year of preferential primaries, and the W. D. has failed to carry its own State. This is no particular disgrace, however, since Roosevelt and Taft both had the same experience. We are living in a year when prophets evidently have to go away from home to ease their heartaches.

All of which means that the Illinois State Pharmaceutical Association, after vainly fighting over the graduation prerequisite for many years, and failing to reach a definite conclusion, finally submitted the question this year to every druggist in the State for a popular vote. The result was 965 votes in favor of the prerequisite, and only 247 against it. The victory was so conclusive that it was unanimously decided at the annual meeting of the association last month to approve of the prerequisite idea, and to seek an amendment to the pharmacy act at the next session of the

State legislature. At last it looks as if Illinois would have a graduation prerequisite law very soon.

* * *

ELEVATING THE STANDARD.

Higher standards in pharmacy have been considered in two or three other quarters. The Louisiana State Pharmaceutical Association, at its annual meeting, adopted a recommendation of its Legislative Committee that the graduation prerequisite be approved, and that a bill containing it be introduced into the State legislature. This question has been up in Louisiana for several years, but for one reason and another nothing definite in the way of results has so far been attained. In New Jersey the situation with reference to the graduation prerequisite is made the subject of a letter from Professor Lohmann in this issue of the BULLETIN. Professor Lohmann declares that, contrary to the reported impression, the two schools of pharmacy in New Jersey are a unit in favor of the prerequisite, and that its recent death at the hands of the New Jersey legislature was due to another factor. It looks as though another bill would be introduced at the next session of the legislature.

In New York State the Pharmacy Council of the Board of Regents has passed a resolution recommending that the degree of Bachelor of Science in pharmacy be made customary and that it be granted only after three years of pharmaceutical instruction following a full high school course. It was also recommended that the degree of Doctor of Pharmacy be conferred only after the completion of three years of resident work subsequent to the attaining of the degree of Bachelor of Science in Pharmacy. These new recommendations do not become effective until January, 1913.

The decision with reference to the degree of Doctor of Pharmacy would apparently put this degree on the same basis as that of Doctor of Medicine in New York State. Unless we are mistaken, the latter is granted after a full four years medical course, preceded by two years of collegiate or university work, making a total of six years. Certain schools of pharmacy, however, are giving the degree of Doctor of Pharmacy for much less work, and it remains to be seen whether the Board of Regents in New York can standardize the degree in the manner suggested.

ANTI-NARCOTIC RESTRICTIONS.

On more than one occasion the BULLETIN has argued that it is of little use to enact an anti-cocaine law and leave the sale of opium and morphine unchecked. It is equally futile to have an anti-opium law, with no restrictions on the sale of cocaine and other narcotics. For a drug habitué, denied solace in one direction, will frequently if not always turn for sympathy in another, and no real good will be accomplished. This truth has been forced home in Kentucky during the last few years.

Kentucky has an anti-cocaine law, but there has practically been no let or hindrance in the sale of opium and morphine. The Board of Pharmacy has vigorously and with great courage sought to do what it could. The sellers of cocaine have been prosecuted with great energy. But little could be done, so far as opium and its alkaloids were concerned, and the Board has recommended time and again that the situation be corrected by legislation. The chance came this year with a Louisville druggist as a member of the legislature—Emanuel J. Meyer. Mr. Meyer worked hard and got a bill through the legislature, and signed by the governor, restricting the sale of opiates to physicians' prescriptions, and the Board of Pharmacy is now in position to close the leak by which its efforts have been rendered futile all these years.

Incidentally, during the passage of the bill through the legislature, it was declared that probably 200,000 ounces of morphine had been sold in Kentucky every year—an amount representing 350,000,000 average doses!

* * *

DR. WILEY'S BERTH.

President Taft has not yet appointed a successor to Dr. H. W. Wiley as chief of the Bureau of Chemistry. In the meantime Dr. Wiley himself continues to occupy the center of the stage. For two or three weeks the birth of a son and heir attracted the attention of the newspapers, and there was a good deal of free advice as to how a pure food baby should be nurtured and reared. This losing interest after a time, the Doctor became ill of grippe, and he was apparently in a serious condition for a week or two. Recovering from this, a good deal of publicity was next given to an offer from Boston to make him head of the Board of Health down there. After some

deliberation and more publicity the offer was rejected.

In the meantime the Doctor's berth remains unfilled, as we have said. The drug trade continues to be interested in the candidacy of three of its own men—Charles Caspari, Jr., Frederick J. Wulling, and James H. Beal. Dr. Caspari's friends feel that his excellent record for the last two years as Pure Food and Drug Commissioner of the State of Maryland entitles him to very serious consideration. Dr. Wulling's supporters are still warmly advocating his appointment, and we observe that some of the State pharmaceutical associations are putting themselves on record as in favor of Dr. Beal and are asking for his appointment at the hands of President Taft. The Beal candidacy was started first, and has attained a good deal of momentum in various branches of the drug trade, though it must be said that Professor Beal himself has done nothing to help it along.

Meanwhile it does not look as if President Taft was in any hurry to fill the office. Secretary Wilson has been quoted as saying that for the present things are getting along very well as they are with Messrs. Doolittle and Mitchell in control of the situation.

* * *

ANOTHER FAMILY FIGHT.

Two of our good friends seem to be engaged in a deadly struggle. They are not only friends, indeed, but they enjoy the distinction of being our rivals and competitors also. We refer to the *Pharmaceutical Era* and the *Druggists Circular*. The *Era* says the *Circular* has been committing theft—and it says a number of other harsh things also. It has accordingly brought suit for damages.

What is it all about? Well, we haven't heard the *Circular's* defense, but we find that the *Era* is making some such charge as this: The *Era's* price list contains two or three features which the *Era* itself worked out at the expense of a good deal of time and money and then copyrighted. The *Circular*, ignoring the copyright, "borrowed" these protected features from the *Era* for its own list without saying as much as by your leave, and without even giving any credit. The *Era* saw its labor and cash going for naught, and thereupon brought suit for infringement of its copyright, asking also for an accounting and damages.

So there you are. As a good friend of both papers, we must observe a strictly neutral attitude, somewhat resembling the picture of Justice holding the scales aloft with suspended arm. We hope, however, that our two friends won't be too mean toward one another, and we trust that no soiled linen will be washed on Broadway. To be accused of theft—Oh my, isn't it awful? We just can't believe the *Circular* is guilty, because we remember that on more than one occasion it has indignantly charged other journals with the same offense. Isn't this proof of innocence?

* * *

WILBUR WRIGHT'S DEATH NEEDLESS?

The recent death of Wilbur Wright has brought out many expressions of high praise for the man and the inventor. It is quite generally declared that he deserves to rank with great men like Watt, Fulton, Whitney, Morse, Bell, Edison, and other inventive geniuses of the age. The death of such a man, so early in his career, has seemed a needless sacrifice, and we find the *Boston Medical and Surgical Journal* devoting an editorial to this phase of the question.

Mr. Wright died of typhoid fever, and the *Journal* argues that deaths from this disease are now entirely inexcusable, since absolute immunity may be secured by the use of a protective inoculation of typhoid vaccine. This remarkable agent has so far not been found of any particular service as a curative, but as a prophylactic it is all but certain in its action. Wilbur Wright had of late years made very few flights, and in this respect and in others had avoided the professional risks of his occupation. He had, however, in the *Journal's* opinion, failed to avoid another risk equally great.

The *Journal* even goes so far as to declare that every man of prominence in the community, whose life is of great value to himself and his country, should be protected against typhoid fever by the preventive use of typhoid vaccine. Ultimately, indeed, the *Journal* hopes that the employment of the vaccine will be made universal.

* * *

CERTIFIED DRUGGISTS.

An interesting step was recently decided upon at a get-together meeting in New York City. The meeting itself had been arranged by the New York branch of the A. Ph. A., and the members of the Medical

Society of the County of New York were guests. Among the addresses delivered from the pharmaceutical side of the house was one by Dr. James H. Beal, General Secretary of the A. Ph. A., who was brought from Scio, Ohio, as a special attraction. But we started out to mention the interesting action taken at the end of this meeting. It was decided on motion of Jacob Diner to appoint a joint committee of 20 members—10 from the Medical Society, and 10 from the New York branch of the A. Ph. A. This committee will be asked to formulate some plan of differentiating between pharmacists professionally, and of publishing a list of those especially worthy of the confidence of the medical profession. This will be somewhat after the method followed by the Milk Committee of the New York Medical Society in certifying to the hygienic condition of commercial dairies. If the list of approved druggists is finally published, we shall know who is who in pharmaceutical circles in New York!

* * *

A WORTHY CAUSE. The Tennessee Pharmaceutical Association has undertaken a most interesting and important piece of work. It is now endeavoring to raise an educational fund for the assistance of worthy young men who need financial help in getting a pharmaceutical training. The money will not be given them, but instead will be loaned, and the idea is to help them through the pharmacy school. A start was made at the convention last year, when it was voted to lay aside $10 from the treasury every year for this educational fund. Since then a committee has been appointed to increase the fund greatly by individual donations. An appeal to every druggist in the State has been made during the last month or two, and it is hoped to be able to report a collection of a thousand dollars when this year's meeting opens at Chattanooga during the present month. The secretary of the committee is M. E. Hutton, of Nashville.

It will be remembered that the Michigan State Pharmaceutical Association developed a plan of this kind some years ago as a memorial to the late Dr. Prescott. The Prescott Memorial Fund has been used to help a number of young men through college who would otherwise have had to deny themselves a pharmaceutical education.

ANOTHER CASE! We dislike to say "I told you so," especially when human sorrow is involved, but we cannot resist the temptation to print the following from a recent issue of *N. A. R. D. Notes:*

> J. E. ——, a loyal member of the N. A. R. D. at ——, Ky., had the misfortune to lose his drug store and its contents by fire on May 24, 1912, the value being about $2000; no insurance.
>
> Bro. —— has been ill and confined to his room for the past eight months. The loss is a severe one to him, and he has expressed a willingness to receive contributions from any of his fellow druggists and others who are disposed to come to his assistance.

While we are exceedingly sorry for Mr. ——, and while we hope that members of the N. A. R. D. will come to his assistance, we are moved to ask once more: Why will druggists continue to make the unfortunate and needless mistake of carrying no fire insurance? The cost of protecting a stock of $2000 would have been inconsiderable, but just because this druggist wasn't willing to spend a small amount of money he is now in severe straits. Certainly no druggist ought to be without fire protection.

* * *

DEATH OF HENRY BIROTH. Henry Biroth, honorary president this year of the A. Ph. A., and a prominent member of the Chicago Veteran Druggists' Association, died May 29 at Baden-Baden while abroad. His daughter, Mrs. Massey, had been sent for, but did not reach him in time. John Blocki, another one of the veterans, was with him on his tour. Mr. Biroth was a man of singular gentleness of character. Wilhelm Bodemann, a personal friend of over forty years, describes him as "an art connoisseur, a music lover, a philosopher, a poet, and a genuinely good man."

* * *

Will somebody of diplomatic ability—some one who can turn the other cheek if necessary—please set General Charles Mylert Carr straight? He still insists in *C. R. D. A. News* that if a merchant "pays cash and takes the discount he doesn't need any credit." Doesn't he need it during the ten days' interim? Would the jobber send him the goods at all, and put them in his possession, if he didn't have credit? And doesn't he best establish his credit by the very custom of "paying cash and taking the discount?"

EDITORIAL

THE IRONY OF FATE.

The BULLETIN has had nothing to say about the sinking of the *Titanic*. We have left that chapter of horrors to the newspapers and the lay magazines. But some of the material accepted for publication in our journal prior to that great disaster has since taken on new significance. Mr. Cooper, of Lion's Head, Ontario, in an article in this issue describing a trip to Europe, speaks in the most glowing terms of the Cunarder *Lusitania*. This story was written last summer, and was one of the vacation narratives that we were soliciting at the time. It is a question whether the writer could to-day pen a similar eulogy of the modern ocean-going vessel! The first few paragraphs are virtually a panegyric of one of these great monarchs of the sea. Mr. Cooper waxes eloquent in its praise and declares that "It gives the lie to the anguish-laden cry of David, 'What is man that Thou art mindful of him? and the son of man that Thou visitest him?' "

Perhaps it takes just such a disaster as that of the *Titanic* to prove the wisdom of David. What could bring home to us more forcibly the truth of this biblical line than the thought of that mighty ship, worth more than the largest drug manufactory in the United States, the last word in naval architecture, going to the bottom on its maiden trip, a mass of wreckage! With all due respect for the great ship on which our friend sailed, it will be a long time before any of our readers will write of an ocean vessel in a similar vein. One can't help seeing a certain irony in this encomium to a class of steamers that less than a year afterward must surrender their prototype to the elements. Time and fortune play havoc with the writings of men. Over night the entertaining may change to the gruesome, praises may give way to criticism, and a feeling of confidence to one of insecurity.

By way of showing us the luxury aboard these vessels, our contributor submits an illustrated booklet distributed by the steamship company. The following excerpt is typical:

> This room is a veritable triumph of the decorator's art. We have a perfect representation of an eighteenth century French salon. The walls are paneled in dull polished mahogany with gilt mouldings, relieved by fleur de pêcher marble pilasters and Aubusson tapestry panels. The carpet is pearl-grey with blush-pink roses, forming a foil for the chairs and settees, which are the acme of comfort and luxury.

How strange it all sounds now! Almost like a travesty!

Events of a day sometimes suffice to change entirely the light in which a printed page or line is read. It was only a few days after news of the *Titanic* disaster reached the BULLETIN office, for instance, that we were perusing the proofs of jokes culled for The Scrap Book. This material had, of course, been compiled weeks before that tragedy took place. To our dismay we ran across a joke which had been clipped from the *Louisville Courier* prior to the disaster. It read somewhat as follows:

> Aunt to her niece: "You know, my dear, I feel alarmed. I am so afraid of icebergs."
>
> "Nonsense, Auntie, there is no need of alarm. There is nothing to fear."
>
> Auntie: "Well, anyhow, here's a dollar. Give it to the captain and perhaps he will be more careful."

What gruesome humor! It is needless to say the editor ran his lead-pencil through this joke in a hurry. It was acceptable enough when clipped, but in the light of new circumstances had ceased to be amusing. The joke, however, like Mr. Cooper's praise of the Cunarder in this issue, only goes to show the irony of events and the effect of time and fortune on the ideas of people.

THE STATUS OF PRICE PROTECTION.

Just what may be done in the maintenance of prices on articles not protected by the patent laws, is still very much open to question. The decision of the United States Supreme Court in the Miles case was confusing, and since that decision was rendered it has not been at all clear whether any other form of price protection would be considered valid under the Sherman law. In the meantime, however, the Miles Company, the Freeman people, and other manufacturers have so changed their price maintaining plans as apparently to make them legal. The N. A. R. D., too, has worked out a plan which it hopes and believes will stand the test of court construction. In the event that it will not stand this test, however, the N. A. R. D. is also endeavoring to have the Sherman act amended

in such manner that retailers may act together for the protection of their own interests, and may establish price-restrictive measures of a reasonable character.

So much, then, for the status of price protection as it affects trade-marked and proprietary articles which are not patented. Everybody understands, of course, that the so-called "patent medicines" have never been really patented at all—barring a very few instances which need not be considered. So far as price-maintaining agreements or contracts are concerned, there is a vital difference between patented and unpatented articles in that the former, unlike the latter, may be controlled absolutely by the owners of the patent. The owner of a patent, given a monopoly for a certain period by the government, has always been able to say under just what conditions he might or might not sell his article, and he has also been able to impose conditions upon those in turn who bought the article, either for their own use or for resale. A few months ago, indeed, a decision was rendered by the Supreme Court which confirmed this right so absolutely that a wail of protest sprang up all over the country.

Since then there has been more or less of a desire to curtail the privileges accorded patentees, and so it is that one or more bills have been introduced in the present Congress making it illegal for the owner of a patent to place any restrictions whatsoever on the use or sale of the goods after they have left his hands. Among other results, such legislation would effectively wipe out all price-maintaining contracts or plans so far as patented articles are concerned. Naturally enough, the makers of patented goods have flocked to Washington and have vigorously opposed the passage of these bills. They have also gotten the advertising journals enlisted in the cause on the plea that whatever hurts their business will make it necessary for them to curtail their advertising appropriations. Deny them the full benefit of their advertising, they say, and they will no longer use advertising in full measure.

The whole question is an exceedingly interesting and important one. Just what Congress may do with these bills it is yet too early to predict. On the one hand we have the effort of the N. A. R. D. and other retail organizations to so amend the Sherman law as to make price agreements possible. On the other hand, we have a group of bills in Congress introduced to make price agreements impossible and illegal. Congress will find it necessary to reconcile these conflicting movements, and in time to work out some policy which will protect the public interest.

MOVING WITH THE TIDE.

In this age of branded goods, when many druggists are pushing some special line, it is pertinent to inquire, "Who are selling the products that need *no* pushing? Who are supplying the popular articles that sell themselves, that are being borne forward on the shoulders of mighty advertising appropriations?"

Millions of dollars are spent annually to give publicity to a wide variety of articles for which the drug store is the natural avenue of distribution. But is the druggist making the most of the opportunity? That he occupies a strategic position every manufacturer knows. People are being sent to him as they never were before; but is he fostering the movement? Just glance at the advertising pages of any popular magazine and see for yourself the barrels of money that are being spent to create business for the dealer who is wise enough to handle the goods. What a mistake, then, what a pity, to let all these expenditures go on without trying to derive from them those advantages that they are intended to convey to the druggist! Let a proprietor sell what make of goods he will, but let him also carry the advertised articles, the kind that people are being educated to buy and order spontaneously.

Any druggist who fails to arrange at intervals a window display devoted to modern advertised goods is missing an opportunity to make his store the place of the hour, the modern up-to-the-minute shop, where things in popular demand can be had. He fails to see that the manufacturer is sending customers to his store. By his very inertia, he obstructs instead of quickens the movement of trade to the retail pharmacy. The druggist who fails to link his store in the minds of the people with the leading national producers, is making one big mistake. As well bury our faces in the sand as be blind to the enormous influence of the advertising manufacturer. He

reaches more homes for you than you can reach yourself. And never has the manufacturer of popular articles been more eager to coöperate with retailers for the creation of new business than he is to-day.

Good Housekeeping Magazine, for example, has even gone so far as to establish a cut and copy department that furnishes the druggist and other retailers with advertising material bearing on the sale of household articles exploited to the public in its pages. Many druggists have wisely taken advantage of this service, for we have seen some of their circulars in which this material has been used. They have realized that advertised goods are self-selling. They spell easy business. They save time. They mean a quick turnover, create good-will for the men who handle them. They hold customers. They afford a line of negotiable stock that the people want, goods that can be turned into cash at a moment's notice should the money ever be desired. Are such benefits to be slighted?

THE FLY NUISANCE.

The druggist, as one of the skilled men in his community, is looked to for advice and leadership in matters affecting the public health. He ought therefore to do what he can in this new movement to get rid of the housefly. During the last few years it has been discovered beyond all question of doubt that flies are carriers of many diseases, chief among them being typhoid; that their habits are filthy beyond description; that they are constantly bringing into our houses and onto our food the dirt and the disease germs collected from alleys and other unclean places; and that they are altogether a startling menace to the public health.

"We must get the fly or the fly will get us" —this is the warning which has gone forth from all the boards of public health during the last year or two. The difficulty of the problem is found in the enormous procreation of the fly. Dr. Hewitt, a well-known investigator of the fly problem, has discovered that a pair of flies, beginning operations in April, may be progenitors, if all were to live, of 191,100,000,000,000,000,000 flies by August. Think of it! This illustrates the importance of attacking the fly problem as early in the summer as possible, and keeping at it vigorously.

In cities the two places where the fly nuisance is propagated most are manure piles and garbage cans. In the former the flies breed in great numbers; around the latter they swarm for food. Nearly all cities of prominence in the country have recently passed ordinances regulating the disposal of manure and providing for the use of proper garbage receptacles. In many cities, too, the use of fly-traps has been urged strenuously during the last year or two. These are placed where flies are most frequently found—on garbage receptacles, for instance—and they successfully catch millions of the pests. A number of boards of health in different cities have offered prizes to those catching the most flies, and the whole movement, in all its aspects, is deserving of the very greatest consideration and the most general support.

The fly is not only a nuisance—he is a source of great danger. Fortunately he can be very largely eliminated if the problem is attacked with vigor and unanimity. Every man who has his own health and the public interest at heart should concern himself with the fly problem and help the good cause along.

THE HALL OF FAME

A WESTERN JOBBER.

During the last few months we have been running in the BULLETIN OF PHARMACY a series of portraits of well-known jobbers

L. B. BRIDAHAM.

throughout the country. One picture came in too late for the series, however, and we are therefore reproducing it in this place. It will be recognized as an excellent likeness of Lester B. Bridaham, vice-president and general manager of the Davis-Bridaham Drug Co., Denver, Colorado.

DR. STANISLAUS REMEMBERED.

Dr. I. V. Stanley Stanislaus has recently resigned his position as dean of the Medico-Chirurgical College of Pharmacy in Philadelphia, and it is announced that he will go into the manufacturing business. Dr. Stanislaus made a good record at the Medico-Chi, and it

DR. I. V. STANLEY STANISLAUS.

is very evident that he endeared himself to the students and alumni. On June 1, at the annual meeting of the Alumni Association, he was made honorary president of the organization and was presented with a handsome silver loving-cup. The presentation was made by W. Wilson McNeary, president of the Alumni Association.

A DRUGGIST TURNED BANKER.

There isn't money enough in the drug business for some people—even though they are remarkably successful at it. This doubtless explains why B. S. Cooban, the well-known druggist of Chicago, has turned banker and has recently been elected secretary of the Chicago City Bank and Trust Company. We are showing a recent portrait of Mr. Cooban and a picture also of the interior of the bank with which he has become affiliated. Incidentally it ought to be explained that Mr. Cooban will still retain his store, although he expects to be at the bank most of the time. The net result

B. S. COOBAN.

will be that a hard-working man will become still more industrious. As readers of the BULLETIN know, Mr. Cooban was for several years a steady contributor to this journal, and for a considerable period he also conducted a

The Chicago City Bank and Trust Company.

department known as "The Druggist's Specialties." Since then he has been so thoroughly occupied with his growing interests that we have heard relatively little from him, but his success and development are matters of interest to us and to our readers.

D. J. Fink of Holdredge, Nebraska, whose pharmacy this is is one of the prominent men in pharmaceutical affairs in that State. Mr. Fink himself stands at the left.

Here we have the Berry Drug Co. of St. Matthews, S. C. The fixtures look as if they were made by Bangs, while the space given up to soda indicates that quite a business is done in that line.

E. G. Burroughs, Ladonia, Texas, is understood to be one of the best business men among the pharmacists of his State. His success has been very pronounced.

Ed. J. Neer is the proprietor of this store in Portales, New Mexico. Mr. Neer himself is the gentleman behind the counter at the right.

William McIntyre, the well-known retired pharmacist of Philadelphia, is seen standing outside the store which he owned and conducted up to the time of its sale six years ago.

H. H. Pember, Rock Valley, Iowa, certainly has a unique and interesting looking store—built after his own ideas. Mr. Pember is the gentleman in front.

A page of American Drug Stores.

We start off this page with a pharmacy in Caracas, Venezuela. The proprietor is M. A. Abrahamsz, who is presumably the gentleman standing in the foreground.

We next jump over into Honduras, and we show an interior view of the "Farmacia Central de Arias," owned by Fiallos y Cia. The town is Santa Rosa de Copan.

This store is located in Port Limón, Costa Rica. It is under the ownership and control of Kirkpatrick Hnos., and does a gratifying business.

We are now in Lima, Peru, and this is the store of Messrs. F. Bressoud & Cia.—one of the most prosperous in the country, and well known to travelers.

Jumping over now into Australia, we have here the American-looking establishment of J. A. Walker, in Northcote, Victoria. This is certainly a neat-looking building.

This is a nearer view of Mr. Walker's window, containing a display of a well-known American product—Euthymol Tooth Paste. American goods are evidently featured.

A page of Foreign Drug Stores.

Druggists Photographed in Their Stores.

4. Charles A. Storer, Chicago, Illinois.

[Picture made especially for the BULLETIN OF PHARMACY.]

A VACATION ABROAD.

One of the BULLETIN Readers Takes a Trip to Europe—A Description of the Voyage—His Impressions of London and its People.

By S. C. COOPER, PHM.B.,
Lion's Head, Ont.

There are people living who remember taking six months to cross the Atlantic Ocean. And not a few recall the generally accepted statement that a person in an express train going more than thirty miles an hour would find it impossible to breathe. To-day we defy the wind that the ancient mariner sought to propitiate. The evolution of invention constantly exchanges the wasteful for the economical. We cannot look back; we dare to look and to leap forward.

THE START.

Such random thoughts as these coursed through my mind as we swung clear from Long Island and began our race toward Europe. Beneath my feet was the deck of the Cunarder *Lusitania,* at that time the last word in naval architecture—a concrete monster that had audaciously and assuredly taken tribute from the mechanical and artistic geniuses of the ages; a gigantic structure that the god Man had pronounced good. And as she cut the breakers and wallowed the foam, gorged mountains of coal and belched forth rivers of ashes and waste, I considered that the lie had been given to the anguish-laden cry of King David: "What is man, that Thou art mindful of him? and the son of man, that Thou visitest him?"

I timed her! For one hundred and thirty-one hours less ten minutes she had, without intermission, thrashed the waters of the deep. Years before she had found herself and in the exuberance of youth had smashed all records. Day and night the same vibration thrilled her, only 'twas a little more pronounced as she reached the haven, having like the "ship of the desert" consumed the life-giving energy from the depths of her vitals, which made the modest efforts of the shining salty spray to hide the gaudy colors 'neath her water-line vain and futile. As on deck I dozed, even slept, drank tea or bouillon, munched biscuits or sweets, or with soul aquiver scanned the pages of Zola's "Truth," my thoughts turned repeatedly to the army of grimy, sweat-drenched human beings down in the bowels of that leviathan feeding the capacious maws of a hundred insatiable furnaces.

VIEWS OF LAND.

We had passed the bleak and barren coast of Ireland and were making our way to the southwest corner of Wales. The beautiful, emerald-tinted shores came into view, the ship hove to, and we boarded the tender for Fishguard. Goodwick reminded us that we were in another continent. The language, manners, and customs of the people were different. We liked it so well that we stayed there that night,

View of the grand dining saloon on the *Lusitania*.

and arose early to see the village before leaving for London.

The quaintness of the landscape delighted us. Everything seemed small. Small railway carriages and cars, small picturesque stations, small white-washed houses, small hedge-bounded fields; with a changing panorama every minute. After passing under the River Severn, thus getting into England, everything looked more prosperous, and on a larger scale.

An express train places you in London in less than four hours, which means that you can cross England in two hours. As I looked

down the vista of English history and thought of what skeins had been unraveled, what burdens had been carried, what triumphs had been scored, in and by, that tight little island, I, in spirit, patted her on the back with a "Well done, little 'un!" I realized that greatness had no reference to size or number, but the importance of a commonwealth depended upon the accomplishments and ideals of her people. One man can give the key-note of an inspira-

First-class "lounge" on the *Lusitania*.

tion for an empire, yea, for the whole world, even as Hampden did for England, as William Tell did for Switzerland, as Garibaldi did for Italy, as Voltaire did for France, and as Washington did for the United States. I realized also that a commonwealth prospered in proportion as she resisted oppression.

LONDON READY FOR THE CORONATION.

In London at Paddington Station we stepped into a taxi and were soon one of the units of a striving, puffing, grinding, honking, ill-smelling mass, dodging in and out past slower vehicles, stopped now by a string of traffic at a cross-street and again by a policeman's uplifted hand. We passed buildings that for centuries had been England's pride, that were now hidden by far extending tiers and scaffolding that supplied seats to view the coronation procession. Pall Mall, St. James Street, and Whitehall were lined with poles, spanned by arches, and festooned with bright artificial garlands. Each building contributed its quota to a drafted scheme of decoration. From Trafalgar Square we could see the two opposing parallel streams of traffic crossing Westminster Bridge; opposite, the National Gallery was hidden by coronation seats.

London is a monster, a gigantic multi-milleped, sullen and playful, yet determined and irresistible. It has an indefinite something in its disposition, something that insinuates, then throws about you cajoling tendrils, and finally holds you with the bands of an octopus. The usual city strikes you as a pile of bricks and mortar, but London becomes a thing with life and instinct, a being capable of investing one with inspiration. You cannot know London by simply seeing the sights. London must grow upon you, and little touches here and there help it to do so.

INTERESTING INCIDENTS.

One evening at the Baker Street tube station a dozen factory girls waiting for the train formed on the platform in two lines. Each faced the other, and with enthusiasm, laughter, gesture, and romp, each with a penny bunch of flowers in her hand, sang in unison, "Fall in and follow me."

One warm evening a characteristic "Charlie" was strolling along the Dalston Junction platform with his coat over his arm; a "lady" on a train passing through put her head at the window and queried, "Pretty warm, mate?" With a blank stare Charlie replied, "If I were cold I should put my jacket on."

The veranda café.

Being "spotted" as "Americans" we thought very amusing. One boy on the street explained: "I usually can tell the Americans because they have gold in their teeth, and the way they talk, sir." The street-hawkers persisted in trying to sell us miniature "Stars and Stripes," and passing a stall of trinkets we were informed, "They are all good, made in America." Further on a newspaper vender

bawled into my ear, "All the latest New York papers, sir!"

As my wife and I are Canadians our merriment may easily be imagined. By usage the word "American" has come to be restricted to the United States in application. The visible gold supply was *nil,* but the urchin got some copper.

How the Druggist's Sundries Are Made.

FOURTH PAPER: PRESCRIPTION BOTTLES.

One of the Oldest Industries Known to History—The Manufacture of Glass—The Blowing of Bottles—A Glimpse into the Chemistry of the Work—The Effect of Heat, Light, and Moisture on Prescription Ware—How Graduates are Made—A Delightfully Interesting Article.

By JOHN WHITALL NICHOLSON, Jr.,
Of the Whitall Tatum Company, Philadelphia.

While the prescription bottle can scarcely be classed as an item of druggists' sundries, its claim to attention here is none the less valid, owing to the vital interest every druggist has in the character and quality of the prescription vials used in his store. This article therefore, without going into technicalities, will endeavor to explain the process of manufacture and other points of practical interest to the druggist, gleaned from the experience of a factory that has been making glassware for over a century.

EARLY DISCOVERY.

The history of glass making dates back at least 4000 to 6000 years. Rawlinson, a most conservative authority on the subject, states that "glass was known in Egypt as early as the Pyramid Period," which is estimated to have been about 2450 B. C. The earliest evidences of glass manufacture are found in Egypt, and to the Egyptians therefore must be given the credit of discovery of the art. Owing to a story told by Pliny, and subsequently repeated by Tacitus and Strabo, it has been thought that glass making was an accidental discovery made by some shipwrecked Phœnician mariners while cooking their food on the banks of the River Belus. This seems to be substantiated by the good quality of the sand at a point near the mouth of the river and also by the excellence of subsequent Phœnician glassware, but it is highly improbable that the high temperature necessary for the production of glass could have been obtained under the conditions described in Pliny's Narrative, and the story therefore has been discredited.

DEVELOPMENT OF MANUFACTURING PROCESSES.

The ancient methods of manufacture were of course very crude, but it is interesting to note that up to the middle of the last century the processes in use were still little better than those which reached their perfection in the middle ages. Even now the old operations are carried on in much the same way, but with improved tools and implements which greatly facilitate the work. Recently, however, there have been many inventions along the lines of strictly mechanical processes with the view of eliminating as much as possible the uncertain element of skilled labor. Most of these have proved failures or have been commercially impracticable; but in certain lines of bottles, principally of the wide-mouth variety, mechanical processes are in almost universal use, and at recent exhibitions machine-made bottles have been shown which compared favorably with the hand-made article.

Doubtless mechanical methods will ultimately take the place of all of the old operations still in use, but at present skilled labor is still necessary for the production of high-grade prescription ware.

CRUDE MATERIALS.

Silica (sand), soda (soda-ash), and lime are the principal and essential constituents of glass, which we may define as an amorphous structure, a vitreous body with the entire ab-

sence of any definite grouping of the molecules into crystalline formation. Potash, lead, zinc, tin, and antimony also play a part in the manufacture of various kinds of glass, and other materials, as manganese, oxide of iron, cobalt, arsenic, etc., etc., are also present either as impurities or as chemicals used to correct or neutralize impurities.

Owing to the fact that the transparency of glass shows up defects in color or quality very readily, great care must be used in the selection of raw materials and their proper mixture before they are introduced into the melting pot or tank. In this respect greater care must be used in the manufacture of flint bottles than in window glass. Window glass, while transparent enough for the purpose for which it is intended, will almost invariably show up green when viewed edgewise. This feature the bottle manufacturer has to eradicate in certain lines of ware, as the thick base and double walls of a bottle will show clearly any tinge of color. Other essential requirements of bottle glass are that it be strong enough to resist internal pressure of effervescent liquids as well as the shock of ordinary usage, and that it have sufficient chemical resistance to withstand the action of the liquids the bottle is to contain.

The working end of a tank, showing the openings through which the gatherer gets the molten glass on the end of the blowpipe.

IMPORTANCE OF CHEMICAL ANALYSIS.

The work of analysis, with all its complicated details to meet the varying conditions of the raw materials, the correct fusing of the constituents, and the eradication or neutralization of impurities, devolves upon the chemist.

In the flint glass factory of Whitall Tatum Company, there are two chemists constantly busy testing every bit of material, and regulating from day to day the percentage of the various constituents, in order to counteract any condition that might tend to interfere with the uniformity of the product.

It must first be ascertained that the various raw materials are chemically and physically uniform, in order that the proper results may be forthcoming. For instance, as the moisture in the sand will affect the composition of glass, if perfectly dry sand cannot be obtained, there should be at least a *constant proportion* of moisture. Otherwise it becomes necessary to test the percentage from day to day in order that a uniform product may be obtained. Again, sand is required to be as nearly pure silica as possible, but it is frequently found in connection with fragments of more or less decomposed felspar which introduce alumina, iron and alkalies, which have to be eradicated before it is possible to get satisfactory results. Whatever the impurities may be, it is necessary to ascertain that they are to be found in uniform percentage throughout the material, in order to measure out intelligently the amounts of the various chemicals used for their extraction or neutralization.

MIXING THE MATERIALS.

All material that has passed chemical inspection is then taken to the "batch" house. In the upper part of this building there are bins for storing the various chemicals and raw materials. These bins are connected with the mixing room below by chutes which are operated so as to empty into cars specially designed for the purpose. These cars run on a track, and directly under each chute is a balance of platform style upon which the car rests while the operator weighs out the proper amount of each material required. The "batch," as the mixture of raw material is called, is then taken to the top of the building by means of an endless chain of scoops, and passes down again through two large revolving cylinders, so constructed as to thoroughly mix the various elements. As it escapes from the second mixing cylinder the batch passes into a small car, which is then hauled to the charging end of the furnace or tank.

A MODERN CONTINUOUS TANK.

Before proceeding with an account of the manufacturing process, it might be well to describe one of the great modern continuous tanks and its advantages. The tank is a

large oblong structure having one flat end with a single opening for charging, the other end being semi-circular in shape with about twelve openings from which the molten glass is gathered by the operators. The batch, mixed with a proper amount of "cullet" or broken glass, is introduced into the tank through the charging end by means of a specially constructed carrier which allows the men to stand at a safe distance from the great heat when the door is opened. When looking into this seething hole it is necessary to have a piece of blue glass to protect the eyes from the terrific glare. To form an idea of it, one has to imagine an immense lake of fire appearing as if lighted by many

A "shop" at work. One blower is shaping a bottle on the "marver," while the other is blowing his bottle in the mold. The "snapping up" boy in the center is placing a bottle in the clamp which holds it, while the "gaffer" on the right finishes the lip.

illuminated bulbs produced by the combustion of gases. The batch being turned into a molten mass by the great heat at the charging end, gradually flows down to the semi-circular working end, keeping the gatherers constantly supplied with a uniform molten material to work on.

For all ordinary purposes the continuous tank furnace has now entirely superseded the old pot furnace, although these are still in use when it is necessary to make up a small quantity of some special glass, and where some special materials have to be melted together that could not be kept together in a tank long enough to combine properly.

A tank furnace utilizes heat more efficiently, as the glass surface extends over the entire area of the furnace. Moreover, it permits continuous working, as the charging at one end does not interfere with the work at the other, and there is no loss of time as is the case when refilling or renewing a pot. A large uniform run of glass is the result, as a tank furnace will hold about 125 tons of molten material, of which about 15 tons are used daily.

BOTTLE BLOWING.

At each opening in the front of the tank there is a group of men and boys constituting what is known as a "shop." As a shop carries on its own work separately from the many other similar groups, all we have to describe is the operation of a single one, and we have the process in a nutshell.

The first operation for production by hand, and also for most machine processes, is that of gathering the necessary amount of glass required to make the bottle desired. Each shop that carries on the work by hand has two blowers who gather the glass in the form of a ball on the end of their blowpipes, which are about five or six feet in length with a slightly enlarged end or "nose" for gathering purposes. This must be done with judgment, as too much glass would make the bottle overweight and consequently undercapacity, since the outside proportions of a prescription vial are determined by the size of the mold, and any extra glass, therefore, would cut down the content, because it could not expand beyond the confines of the mold. Too little glass, on the other hand, makes light-weight bottles with too great a capacity accordingly.

After sufficient glass is gathered, it is worked and rounded into a pear-shaped hollow mass by blowing, or rolling on a metal plate called a "marver." The molten mass is thus shaped and distended gradually, the blower swinging the pipe all the while drawing the main mass of glass downwards and leaving a thinner rudimentary neck next to the pipe.

When properly shaped, the molten bulb still attached to the blowpipe is put into the mold, which is opened and shut at the proper time by a mold boy; and after more or less vigorous blowing, as the case may require, the blower detaches his pipe and the mold is opened, showing a perfect bottle but without the lip.

LETTERING.

It might be well to say a few words here about the molds for lettered bottles, as a

large part of this work, aside from the enormous output of bottles for patent medicines, pharmaceutical preparations, etc., is the manufacture of the bottles bearing the druggist's name-plate. All stock molds for prescription bottles of various styles are made with a removable blank plate which can be taken out when desired and the druggist's private plate inserted. One whole machine shop is given over to the manufacture of the molds and lettered plates. The private lettering and

Gatherer, blower, and mold boy. Note the metal tables or "marvers" for shaping the bottles before they are put into the molds. The scales for weighing the bottles appear in the foreground by the mold boy.

designs, which are often quite intricate, are cut into the plates by skilled workmen who have before them the original design or drawing reflected in a looking glass, as of course the reflected image must be followed out exactly in order that the final raised lettering on the bottle will match the drawing.

Each letter is punctured with a little air hole or vent which permits the air or steam to escape during the process of blowing, thus allowing the glass to fill the cavity completely and make a full, well-rounded letter or design.

When taken from the mold the bottle is placed on a pair of scales near-by to make certain that it is not over or under the allowed variation in weight. If it is up to requirements in this respect a "snapping-up" boy takes the bottle to a skilled workman or "gaffer" near-by, who is to finish shaping the lip. The neck is reheated by thrusting it into a "glory hole" in a small furnace for the purpose, and the gaffer then forms the lip by clamping a pair of specially made tongs over the neck and causing the rod to which the bottle is fastened to revolve rapidly up and down the arm of his chair. A "carrying-in" boy then takes the bottle, or rather a number of them, for there are several completed between each trip, to the annealing oven, where the bottles are allowed to cool slowly, giving the glass the proper temper to withstand changes of temperature without cracking.

ANNEALING.

Annealing is one of the most important operations, for without it the glass would be very fragile and brittle—unannealed articles having been known to break and fly into a thousand pieces when placed in a draught of cooler air. The reason for this is that glass is to a certain degree a non-conductor, and when a bottle is made the surface of the glass cools first, forming a crystalline crust which shelters the interior molten mass, keeping it longer in the fluid state and preventing it from contracting as glass generally does when it cools. Thus the interior is in a state of tension, causing the breakage, which is always the result of poor annealing. Proper annealing will allow the glass to cool slowly and evenly, the whole vitreous mass being in harmony with itself, so to speak, and able to stand all ordinary changes of temperature.

A busy scene around a pot furnace.

The annealing oven or "lehr" is a tunnel-shaped structure 50 or 60 feet in length with the fire at the front or receiving end. The bottles are placed on a series of iron trays which are gradually moved farther back and renewed as they become filled. After about ten hours the bottles, having thus become gradually cooled by their slow progress toward the other end of the lehr, are taken out and packed into crates for shipping. If, in their passage through the lehr, they have

become smoked, they are first cleaned. The packer also discards all bottles that have noticeable and undesirable imperfections.

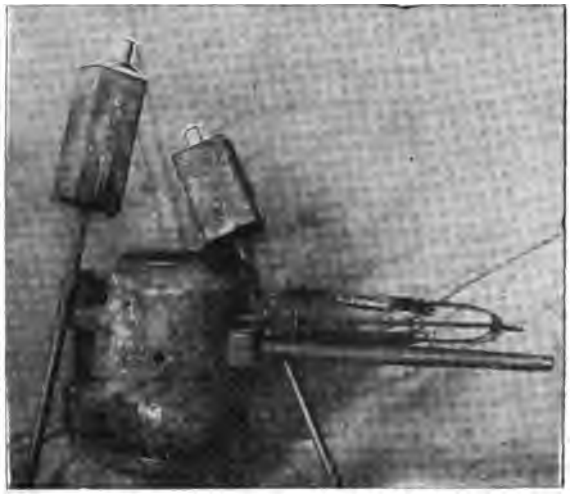
DEFECTS AND HOW THEY MAY BE OVERCOME.

The first defect we shall take up, that of cracking, has already been dealt with from the manufacturer's standpoint. Let us now view it in the light of the druggist's actual experience. Very often it is necessary to pour a hot liquid into a glass container, with the result that the vessel, even though it has been perfectly annealed, will crack. The explanation for this is that the temperature of the inner surface of the vessel is suddenly raised, causing tension against the other cooler portions of the glass, which resist the sudden expansion of the part thus suddenly subjected to the heat. In other words, the inner heated layer is under compression while the rest of the glass surrounding it is under tension, and if this becomes sufficiently great the vessel will be shattered. Vessels of very thin glass, such as beakers or thin soda tumblers, can stand a change of this kind better than those of heavier walls, as the heat is conducted more quickly throughout the entire substance. No matter what the vessel may be, breakage of this kind may be prevented, as every one knows from experience, by gradually heating it up to the temperature of the liquid it is to contain. This is generally done by immersion in water which is slowly heated.

Another feature to be overcome is the corrosion, or white coating noticeable on bottles that have been stored for some time. This is caused by the moisture of the atmosphere, and the action is very rapid in a climate that is warm and moist. It is a fact that water has greater effect on glass than even most acids, but the exact explanation of the action is not fully known. Probably the trouble is due to a partial hydration of some of the silica or silicates. Often it is mistaken for devitrification, but this latter action is not known to occur at ordinary temperatures, although glass when heated in a flame frequently shows the phenomenon; it is, however, entirely distinct from the surface "corrosion" just described.

Moisture of the atmosphere condensing upon the surface of bottles, first has a dissolving action, drawing from the glass more or less alkali which almost always goes into solution as alkali hydrate, potassium or sodium hydrate. This alkaline solution absorbs carbonic acid from the air, and a carbonate of the alkali is formed, appearing as a coating of minute crystals. If this "efflorescence" has not become too far advanced, the bottle may be restored to its former condition by washing with water in which the crystals of carbonate of soda will dissolve, and the separated particles of silica will thus be released and washed away. Often a treatment of dilute sulphuric acid will be found beneficial when merely washing with water does not produce the desired results.

Prolonged exposure to light will affect all kinds of glass, the visible result being a change of color. Under such circumstances, glass containing manganese is especially apt to assume a purple or brown tinge. although radium radiations will have the same effect



Mold, snaps, and finishing tool. Showing how a bottle is held while the lip is being finished, and showing also the tool with which the "gaffer" shapes the lip.

on glass free from manganese. The action of light brings about certain chemical changes in glass which are very difficult to determine, although it is thought to be owing to a transfer of oxygen from one to another of the oxides found in glass. Examples of these changes are to be found especially in skylights where the prolonged action of the sun's rays has given a decided purple tint. This cannot be overcome, but it is a defect which rarely causes annoyance.

"Seedy" glass is common to all manufacturers, and owing to the many causes, which are too numerous to mention here, this feature is a problem every manufacturer has to face. Its eradication in all cases is impossible, but great care is taken to see that

the general run of ware is as free as possible from this defect. It is a fault, however, which does not at all interfere with the use of the bottle, although when filled with certain light-colored and non-transparent preparations the bottle does not present a pleasing appearance. This of course cannot be corrected by the druggist, as it is a feature incidental to the manufacture.

GRADUATES.

Another feature of glass manufacture of vital interest to the druggist is the art of making graduates of absolute accuracy. There has been a small demand for graduated prescription bottles for general purposes, but their inaccuracy, which is often very great owing to the varying amount of glass which changes the content of the bottle, has made them impracticable for measuring out prescriptions. The graduate, then, is absolutely necessary in prescription work, and in this day of required accuracy of weights and measures, fixed mechanical division, or graduation by marks in the mold, are utterly inadequate to meet the strict requirements of the law. The factory which has furnished all the data for this article was the first to see the necessity for producing a graduate of unquestionable accuracy, and for years their output has been and is recognized as the standard, each graduate being stamped with the guarantee.

The graduate "blanks" are made in almost the same manner as the prescription bottles described above, but with different finishing tools and considerably more hand-work by skilled labor. It is in the graduation of these blanks, however, that the greatest skill and the most delicate mechanism is employed, as each separate mark is determined only after careful measurement, ascertained by filling the graduate with the required amount of water and then marking at the bottom of the meniscus when held at the exact level of the eye.

The work of measuring, though requiring unerring accuracy, is made quite simple by the special graduating apparatus devised and controlled by this factory; and, although thousands of measurements have to be separately determined daily, each one is ascertained with speed and precision which precludes the possibility of error. The guarantee of accuracy which goes with every graduate made by this process protects the druggist absolutely from errors arising from misplaced confidence in an inferior article. All measurements are based on the Liter of the International Bureau of Weights and Measures as the unit of volume, in accordance with the requirements of the U. S. Pharmacopœia, and are standard at 15° Cent. (59° Fahr.), the readings being made at the bottom of the meniscus.

The many other phases of the industry, such as chemical apparatus, ointment pots, tubing, homeopathic vials, stoppered ware, show jars, etc., made in the various departments of this factory, would each require exhaustive description, and will necessarily have to be omitted here. The industry is one of the oldest known to history and has developed along many lines, the one just described being next to window glass in importance in the progress of civilization.

A Spacious Texas Pharmacy.—This represents the interesting establishment of W. G. Willman in Brownsville, Texas. Mr. Willman himself is presumably the gentleman standing at the right behind the telephone. Notice the roomy, well-ordered, and light-flooded character of the store. Mr. Willman is one of the most aggressive, energetic druggists in the State of Texas.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

(*Concluded from June* BULLETIN.)

CHAPTER VII.

SPECIAL LINES AND PROFITS.

While it is not as necessary in a full-price town for the druggist to have a good line of special agencies, it is always profitable.

There are plenty of city drug stores, especially those which do a large transient business, and in which the goods are sold almost entirely by clerks, the proprietor rarely coming in touch with customers, where the store can do but little toward introducing a line that is not advertised.

But the average store needs and will profit by individual lines of which it has the exclusive agency or of which it has some advantage in buying, such as getting the jobbing price.

Every store has the power of pushing special goods to some extent. If it has no special lines, that power is wasted on goods paying less profit or is not used at all.

Early in my experience, I decided that the exclusive agency proposition was worth working for, and I made it a point to get hold of every such proposition that I thought would prove profitable. Incidentally I secured some unprofitable ones.

The advertisement which is shown, headed "No one else sells them," shows some of the lines which we pushed successfully and for the most part exclusively.

A CANDY AGENCY.

When I set out to secure some agencies, that of Huyler's candies was the one I most wanted. I knew that I could not get it then as it was in the hands of the nearest competitor, who was doing a satisfactory business. But I wrote to the firm and told them that while I realized that they could not give me the agency then, if there ever came a time when they wanted to make a change I wanted the first chance at it. The time came when Huyler felt that their Delhi agency was side-tracking them and pushing other lines too much. They came to me with an offer, which I took at once.

In the case of any coveted agency the above plan is a safe and good one to follow. I did something the same thing in the case of the Rexall agency. I was not ready to take it when I was solicited at first; so I put them off indefinitely, at the same time saying that I wanted them to give me the first chance at it when it came to the point where they felt they must close it up.

SPECIAL PATENTS.

I took the A. D. S. agency in its early days, and I took it before the Rexall because it required a good deal less money to handle, and I had none too much capital at the time. My idea in the case of the Rexall agency was to take it when it became necessary in order to prevent another store getting it, but to postpone the day as long as I could. After I got it I found that the postponement had been ill-advised. It is a good thing, and I ought to have had it sooner.

Lots of druggists put in a special line of goods and never make a cent on the proposition. They accept the agency. They pay for the first shipment and distribute a little advertising. They sell what goods people come in and ask for, and because the public does not ask for enough to move off the stock, the man who bought it gets sore on the line and wishes he never had stocked it.

In stocking the Rexall and the A. D. S. lines, however, I did not sit down and order

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right down the list, some of everything. I picked out the best selling kinds of remedies and stocked those, became familiar with them, and started them wherever possible. Then from time to time I added new items as the opportunity offered, and developed trade gradually and carefully. Of course the representative of a manufacturing house is very apt to urge a man to put in pretty nearly all the different items so as to have them all and to be ready for every possible demand.

The demand for any proprietary preparation unknown to your public is only a possibility. It is scarcely that in some instances. And while a twelfth of a dozen or a sixth is only a small quantity, when that is multiplied by a score or more of items, it runs up into money just as surely as full dozens, though not so rapidly.

Any money at all tied up in goods for which there is no demand to-day—none until you create it—is money that is doing you no good and that is costing you its keep.

It has always been my policy to buy what I wanted to buy rather than what some one else wanted to sell.

Frequent window and inside displays were made of special line goods, using one article at a time and impressing upon the observer's mind that it was a good article and that it was backed by an absolute guarantee of "Money back for the asking."

The average druggist has a good, large personal acquaintance with whom he can be free to introduce a new article in the place of an old one. We never crowded anything on any customer or insisted in any degree. We gave each buyer the chance to choose between an advertised article asked for and not guaranteed and our special favorite not asked for but guaranteed to be equal or better in quality and returnable.

The Rexall line was treated about the same way in this connection, but the goods were placed in a section by themselves and displayed so as to attract as much attention as possible. The solid blue color of the section made the display conspicuous.

We used with care all the advertising sent us. As demand developed for items that we did not have, we stocked them, thus adjusting the stock to the requirements of the public we served.

A special line cannot be made to boom in a week. You cannot boom such goods as one might be able to further the sale of a popular novelty. Its sale must be built up stone by stone. This requires salesmanship and good advertising judgment. The thing that creates a demand for the goods is advertising the individual articles one at a time in newspaper or window, and getting the literature into the families. Keeping right at this with no attempts at freak methods or spectacular stunts will get the business in time.

THREE GOOD LINES.

Three lines that proved very valuable to our country trade were a line of veterinary remedies, a line of poultry remedies, and a line of stock food. Some similar lines I believe should be carried by every drug store that wants the country trade. Too much of this kind of business is allowed to go to the country stores, the groceries, and the feed stores. The drug store might just as well have a share of it.

My initial stock of the veterinary line cost me $50, selling for $75. The company mailed advertising to a mailing list and furnished a first-class stock or veterinary book, bound in cloth and worth 50 cents or $1. This book, one given out free to any stock-owner, sold the goods, though we helped in many ways.

The poultry line was also an exclusive agency proposition, and the original order was small, no special sum being stipulated to carry the agency. However, plenty of advertising was sent direct to our list, and this included a first-class poultry manual.

The stock food line was not an exclusive agency, though we made it so by pushing the goods, supplying mailing lists, and advertising the goods to such an extent that the other dealers soon quit keeping it. The manufacturers remitted us a $2 credit check for each order that was sent into our territory to farmers buying direct. This method netted a clean additional profit of $10 to $16 a year.

I do not care to be understood as advertising any of these lines I mention. The makers of them have no pull that would induce me to say anything in their favor that was not true. Further than this, I will be glad to add to what I am writing here any further information that any druggist may care to ask me for if it can be given without requiring the detail of a long letter. If any

druggist cares to know more about anything mentioned in this series of articles, I hope he will put his inquiries in such form that they may be answered by simple replies. My only object in making this restriction is to avoid a labyrinth of correspondence into which I might have to venture to keep from appearing crusty and curt in answering inquiring friends.

HOW MUCH I MADE.

How much money did I make in the drug business? Well, I'm going to let you figure out a part of the answer for yourself.

January 1, 1908, my inventory was $3439. Accounts receivable, $457.

From that time until I sold out in May, 1911, my store expenses were unnecessarily heavy. That is, owing to the time required by outside work in the way of writing, etc., I was compelled to keep a licensed man in my store in addition to a junior clerk. My salary list was therefore about an average of $25 for the two men when I could, by giving up any outside work, have got along equally well with a salary expense of not more than half that sum. That means that my store expenses were $650 more than was necessary to do the same amount of business. Of this, however, I will take no further notice, and I merely mention it in order to show that the business paid this much more net profit than appears in the figures given.

My sales for 1908 were $11,327, for 1909 $12,164, for 1910 $13,859—or a total of $37,350.

In 1908 I bought goods amounting to $8142, in 1909 to $8204, in 1910 to $9489—total, $25,836.

My store expenses, including a yearly salary to myself of $1000, were for 1908 $2590, for 1909 $2623, for 1910 $2934—total, $8148.

These figures show a percentage of gross profit for the three years of about 31 per cent and of net profit about 9 per cent.

If the above mentioned $650 a year were added to the profits it would raise the percentage of the net to over 14, which is not to be sneezed at as net income from such an investment as the above.

However, I have taken no note of increase of stock in the above.

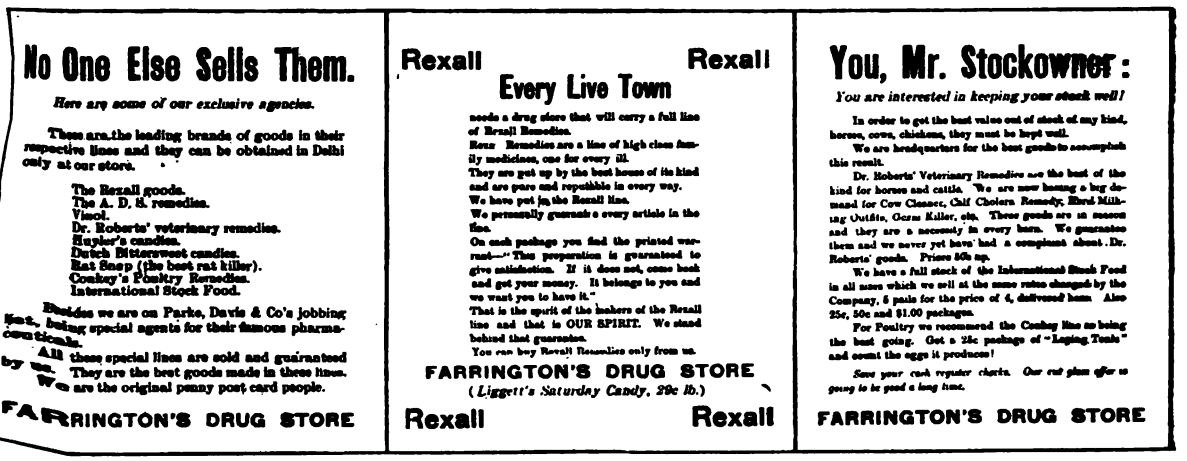
My inventory at the end of three years was $4602—a gain of $1163. Cash on hand and accounts due and other items of the business remaining substantially the same, this sum should be added to the profits of the business, which would raise the net from 14 to over 17 per cent.

ADVERTISING EXPENSE AT THE START.

My advertising expenses for 1908 were $203, for 1909 $180, for 1910 $296. The increase the last year was due to the use of the premium plan, but the increase in the business, which was practically all attributable to this, I think is sufficient justification for the expenditure. This last year's advertising cost was but a trifle over 2 per cent, which is conceded a wise average.

The first four months of 1911 showed total sales of $4720, as against corresponding sales of $4202 for 1910. This was a more rapid rate of gain than 1910 showed—again chargeable to the premium plan. And since my sale of the business the continuance of the premium plan is producing further gains.

During all these years of business my book accounts averaged between $400 and $500,



A group of Farrington ads. used in connection with the promoting plans described in the accompanying article.

and usually a very large percentage of this was for goods supplied to the various county institutions which paid but once a year. My county bills ran as high for a year as $225.

At the close of my business my book accounts amounted to $564.67. The percentage of this which was not good was small. The total amount of accounts which I considered uncollectable, and these were what had accumulated during the life of the business, was $101.10!

This figures out about seven one-hundredths of one per cent of the gross sales for the term of years. Part of this successful handling of accounts is due to the fact that I was made a good collector by reason of always needing the money. Part is due to the fact that I did not like to sell for credit and never encouraged any one to buy in that way. And another reason for the shortness of my accounts is that I shut a man off just as soon as he proved to be poor pay. If he could not pay and pay promptly I did not care for his business. Good goods on the shelves are better than poor accounts on the books.

THE SECRET OF MY SUCCESS.

If you want to know to what I attribute the success of my business I will reduce it to the lowest common denominator, and say in short that I believe that having the goods and advertising them constantly was all the secret there was to it.

If a customer came in, as he did sometimes, and does in your store, and asked for "Fahrenheit's thermometer," I had Fahrenheit's for him.

If there was a call for Pepsin's gum, or Rexall's dyspepsia cure, if some young fellow wanted a pack of "ready-made" cigarettes, or a box of "Hooler's candy," I had the goods for them.

And speaking of mistakes of this sort, I once had a request for "poker chips to boil up for lice on cattle." I never did find out what that man wanted. Another customer wanted a bottle of Castoria for 25 cents. I asked her if it was Pitcher's. "No," she said, it didn't have any 'pitchers' on it, just plain printing." I gave her one with no pictures.

But whether a call was humorous or serious, we made it a point to have the goods—if not then, at least for the next demand. And we advertised them so persistently that there was no excuse for any one within trading distance of the store failing to know that we were there.

PLAYING FOR BIG STAKES.

A Bit of Fiction in which a Young Druggist is Made the Subject of a Practical Joke, and then Cleverly Uses the Situation to Win a High Wager.

By CAROLYN T. MASON.

With the assurance of one on a familiar footing in the establishment, Sam Merton, city editor of the *Brocton Eagle,* walked briskly into the large and successful drug store of his old friend and college chum, Bob Randall, and made his way to the desk in the corner of the back room where he felt reasonably sure of finding the proprietor.

"Hello, old man!" he exclaimed, bringing his hand down with energy upon his chum's broad shoulder. "I blew in to ask if you would do me a friendly turn."

Bob Randall pushed aside the inventory figures which had been absorbing his attention and wheeled around in his chair.

"What is it now, Sam?" he asked, with a whimsical smile. "Want me to sell out and set you up in the newspaper business?"

"Not yet, Bob, although I will take your suggestion under consideration. This time I simply want to borrow your name."

"Good Heavens, Mert!" exclaimed his friend anxiously, "did any one ever tell you that you needed a nerve tonic? Take my money, take my business, take my clothes, but I call the limit on my *name.* It may not cut a large figure in the business world yet, but I have a sort of family feeling for it, you know."

"Oh, turn off the melodrama, Bob!" broke in Merton, laying down the ledger he had carefully aimed at his friend's head. "I said I simply wanted to *borrow* your name. I'll keep

it done up in cotton if you're so confounded afraid it will take cold. If you had held your breath a minute I'd have explained and saved you the loss of all that gas. It's this way: I want to go in for the *Chronicle's* prize. I feel sure I could land it, but the difficulty is that I wouldn't have a ghost of a show under my own name, for no matter how good my stuff might be, old Darnley is not such a fool as to advertise a competitor. Catch my idea? I've been itching to jump into the thing—test my powers, so to speak.

"The money," he added, with a shrug, "is a secondary consideration, although no doubt I could dispose of it if it happened to come my way."

Bob whistled cynically at Sam's protestation of unmercenary motives, then chuckled softly. "It *would* be a joke to carry off the prize under the old dried mackerel's nose," he mused thoughtfully.

"Mind, I don't promise to win," interposed Merton. "But I'll give those duffers a good run for their money."

"And you want *my* name," groaned Randall. "Well, I wouldn't trust it with everybody, but go ahead, son, and good luck to you." And Robert Randall turned again to his desk and to the figures which had been absorbing his attention. Nor did Sam Merton's singular proposal occur to him again until he ran across his friend some days later at the club.

"Well, old chap," he inquired, with a friendly dig in the ribs, "have you made my name immortal?"

"You bet!" returned Merton. "Joking aside, Bob, I laid myself out on that article, and if it isn't declared a winner old Darnley is a bigger blockhead than I take him for."

Two weeks elapsed, and Robert Randall hurried over to Merton's office at the *Eagle* one morning, triumphantly bearing aloft a mysterious long blue envelope the contents of which caused the effervescent city editor to clasp his friend in a stifling embrace and execute a few ecstatic waltz steps which ended in a bear's hug to the imminent peril of Randall's ribs.

"For Heaven's sake, Mert," Randall gasped when he had extricated himself, "have some respect for a man's anatomy. I'd like to take home one sound bone in my body!"

"Why consider a few bones when you're happy? I would give half this check, Bob, to see Darnley's expression when he knew I had walked off with his first prize! But I guess we hadn't better put him next. We ought to have *some* consideration for the old chap's peace of mind."

A week later Merton was hurrying over to Randall's pharmacy in response to an imperious telephone summons. He found Bob excitedly pacing the back room, and as soon as he saw Merton he broke out in irritation:

"I say, Sam, that was a scurvy trick you played on me. I've done nothing for two days but answer that confounded telephone. First it's my picture they want, and next material for my biography, and then all the other blasted papers want 'articles from my pen.' You know I couldn't write three lines outside of a business letter if my life depended on it. I'm a druggist, not a long-haired literary freak! Hang it, stop grinning like an ape! I suppose you consider it funny to get a man in a rotten scrape like this!"

"It's a beastly shame, old fellow," said Merton consolingly, struggling to get his features under control. But finding the effort too great, he went off into another paroxysm of mirth at the tragic expression on his friend's face.

"Forgive me, Bob," he said contritely when he could get his breath; "but is a man to blame for creating a masterpiece?"

"Masterpiece be hanged! I've had to hire a stenographer to answer my mail. There's that cursed bell again! 'Hello. *Brockton Banner?* No, I have no more articles ready, and I *won't* have any. No, I can't be interviewed. What shall you tell your editor? Tell him to go to ——!' " and Randall hung up the receiver with a bang. "Mert, if that thing rings again, I'll smash it."

"Now, Bob, don't get excited. Consider the reputation I've made for you and look at the advertising you're getting free—gratis—for nothing! It isn't for you to get sore. Greatest hit I've ever made, and *you* get the credit for it. Don't you see the *irony* of it?"

"Don't I," groaned Bob. "Have I seen anything else but the irony of it for the last 72 hours! Look at my nerves. I can't attend to business. I have to have my meals sent in. If I start for the club I'm dogged by interviewers. If I go to my lodgings the living-room is full of them. To get any peace of mind I've had to stay cooped up in this back room at my

desk. If this is what you literary chumps like, you're welcome to a gilt-edged monopoly!"

"See here, Bob, it's Saturday. You've got things fixed here in the store so you can get away. Let's run down to the country over Sunday and we'll think this thing out. Louise is down there with Betty this week, and they'll both be delighted to see you. I don't mind telling you, Bob, that I've got Louise to say 'yes' at last, and I'm not going to give her a chance to change her mind. You are to be the best man, old sport, and Darnley's check is going to put up just the best wedding journey ever."

Bob Randall mopped his forehead and removed the last trace of indignation from his usually serene brow. Suddenly he looked at Sam. "Have you told the girls about this fool prize business?" he asked.

"Why no," said Merton. "To tell the truth I didn't feel so blooming confident of winning out as I pretended to you. I thought I would spring it on them as a surprise when I ran down."

"Well, then, don't spring it this trip, Sammy, if you want to do me a favor. I'm too raw yet to stand any chaffing."

"All right, mum's the word, Bobby," agreed Merton.

The weather was ideal for July, and the two days passed rapidly. Under Betty Merton's eyes Bob forgot the burden of his sudden literary fame, although Sam couldn't resist approaching the tabooed topic at times. At dinner Sunday night Louise had innocently remarked: "This country air is what you need, Bob. I thought you looked worried and haggard when you came down."

Sam's eyes twinkled. "The fact is," he declared maliciously, "Bob is considering throwing over the drug business. He has had some flattering offers lately."

"Indeed!" exclaimed Louise interestedly, while Bob scowled. "What kind of offers?"

"Well, I'll let you in on a secret, but mind you don't babble. He is contemplating literature," said Sam in a stage whisper, serenely unmindful of Bob's black looks.

"Yes," growled Randall, "no sense in wearing your brain out with long hours in the drug business when an idiot like Sam can hold down an office chair at a princely salary!"

"How absurd!" drawled Betty wickedly as they left the table. "Bob couldn't write a story or an article if his life depended on it."

"What are you willing to wager on that assertion, Betty?" said Randall quietly, as he followed her to the moonlighted veranda. Sam and Louise were already vanishing down the garden path.

"Why, it wouldn't be fair to bet on a sure thing," the girl replied. If there was one thing Betty Merton enjoyed it was quarreling with Bob Randall. For two years she had tyrannized over him to her heart's content. She intended to surrender in the end, but she also intended to take her time about it. Meanwhile she carefully concealed her intention from the faithful Bob.

But to-night Bob was obstinate. "All's *fair* in war and something else, Betty, but I might have known you would weaken," he taunted.

"Oh, very well," she laughed carelessly. "Name the bet."

"We play for high stakes, Betty. If you see an article published over my signature within the next two weeks, you agree to become Mrs. Bob Randall within a reasonable period thereafter."

"Bob, are you quite sane?" gasped the incredulous Betty.

"Except on one subject," replied Bob significantly. "Come, are you game?"

Betty bridled at once. Bob seemed to be getting the best of the argument. Then, a sudden thought occurring to her, she cried: "I accept the wager with this amendment: 'That in case no such article is forthcoming the said Bob Randall shall refrain from making such a preposterous proposal to the said Betty Merton again."

"Done!" exclaimed Bob so quickly that Betty was piqued. Later on they were bidding one another good night.

"Betty," Bob whispered in the hall as she was starting up stairs, "how long is a *reasonable period?*"

Betty laughed nervously and then tossed her head. "By the way, Bob," she replied disdainfully, "there was no clause in that agreement that I should stay single for the next twenty years while you were waiting for a publisher." But Bob refused to be cast down, and only smiled happily.

The next morning Bob was so singularly

cheerful as the train rumbled into town that Sam was puzzled.

"Any one would think *you* had bagged a prize, Bob," said Sam, in a tone of inquiry.

"I have, my boy, and I don't mind telling you that I am sending a copy of that article to Betty by the first mail, and by special delivery at that!"

"MY BEST PAYING SIDE-LINE."

The Fifth of a Series of Important Articles—This Druggist Finds Optical Goods Very Profitable—He Tells How to Learn to Fit Glasses—The Stock and Apparatus Required—Other Practical Hints.

By J. C. REESE,
Newton, Kansas.

It would be hard to find a side-line for a druggist that would pay him better than optical goods. They yield 75 per cent gross profit, using as a basis $2.75 for alumnico and $5.00 for gold-filled goods. It does not require as much study as might be thought to be able to fit glasses properly. In from four to six weeks much can be done as a starter. To be able to fit a person satisfactorily when the other fellows have not been able to do so, is certainly very good advertising for the optometrist, for the person benefited will be a constant walking advertisement.

TAKE A CORRESPONDENCE COURSE.

One need not necessarily attend an optical college. While this is the better and more satisfactory way, a correspondence course will suffice. Or careful study from a good text-book will be a help. I certainly recommend the college course. There are courses offered by reputable colleges of from four to eight weeks which are very good. In this length of time a great deal can be learned, three times as much as could be accomplished by studying from a text-book. These courses cost usually $25; with other expenses, the total is from $50 to $100, according to the personal taste. Correspondence courses usually cost from $15 to $25. If one wishes to study at home there are no better books than "Refraction and How to Refract," by Thornington. His book is very concise, covering the ground completely, with no waste of words. The cost is $1.50. I also recommend "The Optician's Manual," Volumes 1 and 2. These books are also very good, among the very best I know of. They go into detail on all subjects. I certainly would get these three books for home study, costing $4.00 for the three volumes. The Optician's Manual is published by the Keystone Publishing Co., of Philadelphia, but can be obtained from any optical house, as can the Thornington book. Hartridge on Refraction is also a very good book.

The study of optics is quite an interesting

J. C. Reese.

one and *pays great big profits*. I make 75 per cent gross profit, less a per cent of doing business of say 25 per cent, which would yield 50 per cent *net*. Is there any side-line that would make a better showing?

APPARATUS.

Now as to stock and equipment. In the first place a trial case is indispensable. It costs

from $35 to $75. One costing $60 is good enough for anybody.

In the next place I certainly would get the mediaometer outfit, made by Merry Optical Co., Kansas City, Mo. This costs $100 and consists of the instrument, a mediaometer, an adjustable table, and an electric-lighted test chart with three of the best style test cards. A Geneva pocket lens measurer is very handy, but this could be dispensed with as the same results can be obtained by the use of the trial case lenses—*i.e.*, by neutralizing with opposite signs. This is very slow as compared with the measurer. The cost of the instrument is $6.50.

These are all the instruments that are necessary at first. As proficiency is acquired other instruments, such as the ophthalmoscope, retinoscope, etc., can be added. I want to state here before finishing with the instruments that the purchase of the mediaometer will be your best investment because of its advertising features. The table is optional as well as the chart. If you have a well-lighted room, other styles of test charts or cards will do. But by the use of this instrument, the time required for testing is small compared to the regular trial case method. Consequently the nervous strain on a patient is nothing. I test a compound astigmatic eye in twenty minutes. With the ordinary method it requires from one to two hours. And another very important point, with this instrument we use the fogging system best. This does away with any cycloplegic such as atropine, cocaine, etc., with its discomforts and dangers. This instrument is your best advertisement. It will pay for itself in two months. It is one of your best talking points in your advertising.

Now as to stock, I recommend 1 eye, size 0 for children and 00 for adults. Start in on

1 dozen 1/10 12k. gold-filled comfort temple riding bows	$ 8.10
1 dozen Alumnico comfort temple riding bows	3.65
1 dozen cable temples, gold-filled, 1/10 12k.	3.60
1 dozen cable temples Alumnico	2.20
1 dozen wire temples, 1/10 12k. gold-filled	2.40
	$19.95
The above in 0 and 00 size eyes assorted	19.95
Bridges N to N 2½ Sadler bridge system	$39.90
1 dozen 1/10 12k. gold-filled, comfort temple, riding bow, 00 size, rimless frames*	7.60
1 dozen rimless nose-glass mountings, 251 to 274, all sizes†	10.00
54 pairs (18 different strengths) lenses of assorted sizes, beveled edge, periscopic, first quality 0 eye at $1.85 per dozen pair	8.33
54 pairs 00 size beveled edge (etc.) at $2.05 per dozen pair	9.23
54 pairs 00 eye, 3-hole, rimless, periscopic, first quality, at $2.30 dozen pair	10.35
½ gross leather R. B. cases, lettered	8.80
½ gross leather eye-glass cases, lettered	8.80

For children you can order the lenses and frames from some near-by optical house as well as the bifocals for old people. A person can get along very well with this list given. Of course there will be other things that you will want as is learned by experience. Some tools are required, such as a screw-driver, some different kinds of pliers, extra screws, etc. As to the strengths of lenses to carry, get ¼ dozen pair each of the following: plus 0.25, plus 0.50, plus 0.75, plus 1.00, plus 1.50, plus 1.75, plus 2.00, plus 2.25, plus 2.50, plus 2.75, plus 3.00, plus 3.25, plus 3.50, plus 4.00, plus 4.50, plus 5.00, plus 5.50.

TOTAL OUTLAY.

Mediaometer and test cabinet, illuminated	$ 75.00
Trial set, $35.00 to $75.00	59.00
Lens measure	6.50
	$140.50
2 sizes gold-filled frame temples (extra)	$ 39.90
Rimless frames	7.60
Rimless nose-glasses	10.00
0 eye lenses	8.33
00 eye lenses	9.23
00 rimless lenses	10.35
1 gross cases	17.60
	$103.01
	140.50
	$243.51
Books	4.00
	$247.51

I want to say as a last word, *advertise*. It pays—and pays well!

*These to be used as matter of choice.

†There is quite a variety of good ones. I use "Sure-On" and "Everybodies" mountings.

BATHING CAPS IN THE WINDOW.

By B. S. COOBAN.

Chicago people are fond of bathing on the beach along Lake Michigan. Many live so near the water that they find it feasible to put their bathing suits on at home and stroll down to the lake for a swim. In the summer they may be seen walking toward the shore all ready for the fun. The women are quite as numerous as the men, and of course they must have rubber caps to shield their hair from the water.

Not long ago I arranged a display of these bathing caps in the window. A glance at the illustration shows the scheme. Several false faces were covered with this head-dress, adding a touch of life and humor to what might have been a somewhat flat display. The base of the window was carpeted with light-green cheese-cloth. One face peered out at passers-by from over the top of a barrel while others were seen scattered among the caps. Across the top of the trims were three signs: Bathing Caps, Keep Your Hair Dry, From 15 cents to 5. The caps were of several colors and were supported on blocks of wood. Of course these did not cost anything to speak of. The trim was cheap, but effective.

RUBAIYAT OF THE DYSPEPTIC.

By CLEO CONSTANCE LONG.

Now summer comes again and with it thirst,
I'd drink an ice-cream soda if I durst;
But no, I must not gaze upon the stuff,
For verily I am a man accurs't.

Myself when young did eagerly frequent
The soda fount, and drank with much content
A frothy ice-cream soda, full of fruit;
But now—a pepsin punch for mine, or creme de menthe.

And this reviving herb, whose tender green
Peeps from the frosty cup, o'er which I lean—
Ah, feed upon it lightly, for who knows
What cholera morbus germs may lurk unseen!

I sometimes think that never grows so red
A cherry as those tactfully spread
About the soda fountain to attract;
But no—they shall not make me lose my head!

And when they offer me that darker drink,
And claim it will not put me on the blink,
I simply turn away and shed a tear—
Beef tea! from which my very soul doth shrink.

Oh, thou, who dost with soda water fizz
Beset the path I take to reach my biz,
Thou shalt not tempt me with Banana Flip—
Plain malted milk is best for rheumatiz.

DOLLAR IDEAS

PASTE FOR STICKING LABELS ON TIN.

Harry S. Noel, Williamstown, Mass.: I have used square cocoa cans as drug containers, and have improved the appearance of these cans by covering them entirely with brown paper. As an adhesive agent I use a paste made according to the following formula; it will stock closer than a brother. For its adhesive properties on tin and for general store use it is to be highly recommended. Moreover, it is cheap and easy to make.

Flour	16 ounces.
Boracic acid	4 scruples.
Water	64 fluidounces.
Nitric acid	4 fluidrachms.
Glycerin	3 fluidounces.
Oil of cloves, sufficient quantity.	

To the flour and boric acid add the water, which should be cold, slowly, stirring to make a smooth paste. Successively add the glycerin and nitric acid and bring slowly to a boil. If necessary, the paste may be strained through a coarse sieve while it is thin. This will add to the appearance and do away with small lumps. The oil of cloves is added to the finished product.

This paste has been used to cover both round and square tin cocoa cans with brown paper. The papers make the tins appear uniform. These cans are used as drug containers, the brown making a good background for the white labels.

The paste works very well on collapsible tubes and tin ointment boxes. It keeps well. It may be stored in empty snuff jars or some such containers.

DISPENSING OILS IN CAPSULES.

James L. Tuohy, Salem, N. J.: Many druggists who do not carry the regular empty capsules for oils and occasionally have a call for oils or other liquids to be dispensed in capsules will find the following plan a great help. It is impossible to seal the slip-over tops on the capsules with water as some try to do.

I use the number one capsule for 5 minims. Drop the 5 minims of oil in each cap first, then fill the capsules with starch or sugar of milk, put on the cap, and the powder will absorb all the oil so that you will have no trouble. I have tried this with terebene, balsam of copaiba, and similar materials.

CONSTRUCTING A DRAINING-BOARD.

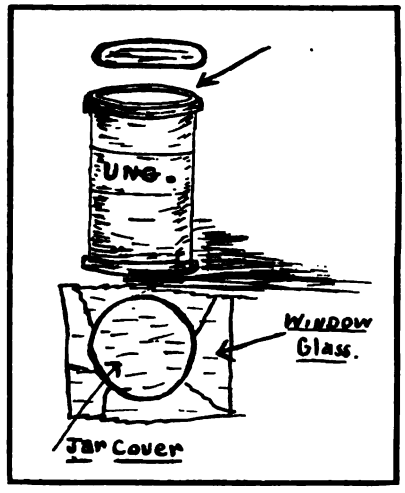
W. B. Camburn, Owosso, Mich.: A most valuable fixture in our back room, near the sink, is a draining-board which we devised. After building two shelves 1½ feet wide by 4 feet long, we had a tinner make a large pan for each. These are built of galvanized iron, and are therefore rust-proof. The sides are five inches high. The bottom is corrugated, so that bottles leaned against the sides do not slip or slide down.

The pans slant to one end, where a pipe drains the water into a pail underneath the lower pan. These pans are good for drying not only bottles, but also mortars, graduates, funnels, etc.

AN IMPROVISED OINTMENT JAR COVER.

Mrs. H. Kalliwoda, Ph.C., San Francisco, Cal.: Often an ointment pot cover is broken. Sometimes the cover is so tall that the jar will not fit between the shelving. As a remedy I suggest the use of a piece of window glass. It forms a neat, dust-proof, and sanitary cover.

Upon a sheet of paper draw a circle the size of the top of the ointment pot. Take a



piece of old window glass, place it over the circle, and with a glass-cutter trace the line on the glass. From the circle to the edges of the glass cut three or four strokes, as shown in the illustration.

Now tap the scrap pieces, breaking them from the circle, and you have a sanitary cover. The ointment adhering to the top edge of the pot holds the cover so that it will not fall off unless with a slow sliding motion.

PROFITS AND EARNINGS

A NET PROFIT OF NOTHING AT ALL!

Here is a peculiar statement sent in by a druggist in Minnesota:

Original capital, April 1, 1911		$ 3,185 00
Invoice January 1, 1912		10,889 60
Fixture invoice		1,441 70
Purchases		22,830 88
Expenses:		
Light	$ 103 48	
Advertising	214 59	
Postage	22 29	
Rent	720 00	
Salaries	2,646 04	
Miscellaneous	837 64	4,544 04
Sales		16,865 66
Book accounts		1,343 58

Now this is apparently a business which was started last year on the first of April. It was either a new store begun from the ground up, or else an old store bought by the present proprietor. The foregoing statement covers the business for the following nine months of the year, until January 1, 1912. In the meantime the stock was greatly increased.

Taking the statement at its face value, we find that on January 1 the inventory of stock showed $10,889.60, and the inventory of fixtures $1441.70—a total valuation of $12,331.30. When the business was started nine months before, however, the stock and fixture account represented a valuation of only $3185, so that an increase was registered of $9146.30.

In the meantime the purchases amounted to $22,830.88. Of this amount, $9146.30, as above shown, went into the stock and fixture account, so that the cost of the goods actually sold was apparently $13,684.58. The total sales, including the item of book accounts, was $18,209.24. Subtracting what the goods cost from what they brought, we have a gross profit left of $4524.66. The expenses in the meantime were $4544.04, so that the expenses entirely swallowed up the gross profits and nothing was left at all in the way of net profit!

Now we may have erred in the analysis of this man's statement. His facts are not given with sufficient completeness. It is possible, for instance, that the inventory fixture item of $1441.70 should not have been considered in our effort to discover what part of the purchases for 1911 went into the permanent investment. Perhaps some of these fixtures, now valued at $1441.70, were not in the store when it was started, but were purchased subsequently during the nine months covered by the statement. In this event it may be that our correspondent, making such purchases of fixtures, considered this a permanent investment and did not include the figures in his item of purchases amounting to $22,830.88. To the extent that this may have been done are our deductions misleading. Such a consideration, however, seems unlikely, and the figures would not be changed very greatly, anyhow.

Assuming that we are correct, our correspondent has made gross profits only of $4524.66, amounting to the very low figure of 25 per cent. This is poor. The expenses, on the other hand, are also 25 per cent, which is probably a fair average for a business of this size, but so large in this particular case that it absorbs the gross profits entirely, leaving nothing in the way of net profits. If in the meantime the item of proprietor's salary is perchance not included in the expense account, then the owner of the business himself has failed even to get his own wage from the store, and has in fact worked nine months for nothing. There would be some hope for him, with a new and growing business, if the percentage of gross profit were greater. He ought to get more money for his stuff.

As we have said, however, the statement may be misleading in some respects, and our comments based upon it may therefore be somewhat inaccurate. In any event it would look as if the business so far was not particularly profitable. As a final remark we would call attention to the rent item of $60 a month. In the other business statement commented on this month the rent is $20 a month, and yet the two businesses are practically of the same size.

A NET PROFIT OF ELEVEN PER CENT.

A druggist in Texas submits the following statement of his business for 1911 with the request that we analyze and comment upon it:

Stock inventory January 1, 1911	$ 6,025 00
Stock inventory January 1, 1912	6,485 00
Furniture and fixtures January 1, 1911	2,452 00
Furniture and fixtures January 1, 1912	2,531.00
Total sales 1911	16,800 00
Purchases 1911	12,139 00
Expenses	1,451 60
Freight	371 60
I. & D. Dr.	182 30
Personal account	1,150 00
Rent at current rate (own building)	240 00

Now we shall have to do a good deal of figuring before we can get at the heart-throbs of this statement. Let us find out first what the actual cost was of the goods sold during 1911. Purchases are given in the statement at $12,139. We must first add to this the freight item of $371, for freight is really a part of the cost of the goods and should always be charged to the merchandise account—it is not an expense. We then have a total of $12,510. We find, however, upon comparing the stock inventory figures for 1911 and 1912, that there was an increase amounting to $460. Goods costing this much money, therefore, went into the permanent stock and were not sold during 1911. Subtracting this from $12,510, representing the total cost of purchases, we have a residuum of $12,050. This is what the goods cost which were sold during the year.

Subtracting $12,050 from the sales of $16,800, we find gross profits of $4750. The next thing to do is to subtract from the gross profits the item of total expenses, in order to find out what the net profits were. But we must first get at this item of expense accurately. Our correspondent has put down expenses of $1451.60, but he has failed to add his own salary as he should. This is apparently the $1150 which he calls his "personal account." It appears, too, that he owns the building, and that he has charged himself an annual rental of $240, which he assumes to be the current rate. Adding together, then, these three items of (1) expense, (2) proprietor's salary, and (3) rent, we have total expenses of $2841.

Subtracting $2841 from the gross profits of $4750 we find net profits of $1909. Adding to these net profits of $1909 the item of proprietor's salary, amounting to $1150, we have a total income from the business of $3059. This is not bad as things go, but still there are some rather peculiar features of this business.

In the first place, the percentage of gross profit is very low. It amounts only to 28 per cent. Our correspondent is located in a small town in Texas where prices ought to be pretty good, and where gross profits of 28 per cent seem to us very meager. Anything less than 30 per cent is certainly most unsatisfactory, and the aim should be to get up over the 35 mark as much as possible. The compensatory fact, however, is that the percentage of expense is also low. It amounts only to 17 per cent, so that the percentage of net profit is 11. This, it must be confessed, is very fair. Anything over 10 must be considered satisfactory.

An expense of 17 per cent, however, is so small that we almost question its accuracy. We wonder if it can be true, and if a lot of things have not failed to be properly recorded? The rental of $20 a month, for instance, seems to us very low for a store big enough to permit a business of $17,000 a year. Our correspondent should check up our calculations of his returns from the business with the actual accumulation of cash, and thus see that the figures are supported. We find that his net profits are $1909. This amount of actual money, above and beyond his own salary of $1150, should have accumulated in real cash, barring the $460 increase in the stock inventory and $79 increase in the fixture inventory. The "I. & D." item of $182.30 we have ignored entirely in making these comments, for the simple reason that we do not know what it means.

LETTERS

HERE'S A NOVELTY FOR A SIDE-LINE.

To the Editors:

I read the BULLETIN with a great deal of interest, and I have been following the series of articles this year on side-lines. I have tried out many which others have tried—sometimes with success and sometimes with failure. I wish especially to testify to the very great interest I took in those articles on the truss question in May, and while they were all good the first prize winner in that contest is doomed to be a successful man, for his ideas and conclusions are absolutely clear and convincing.

But now about side-lines. I wish to say I have one that is peculiar to myself. It is so especially my own, indeed, that I doubt the usefulness of mentioning it, as I do not suppose many men could adopt it. However, I will tell you about it and you can use your own judgment about offering it to your readers. You had better not publish my name, though, lest some one have me arrested for getting goods under false pretenses.

I got married a great many years ago, and in so doing I possessed myself of a black broadcloth suit and a stovepipe hat. Being

of a very quiet and reserved disposition, and being tired of the frivolities of life, I married a woman many years older than myself, and this, too, added to my reserve, for I had to live up to both that suit and my wife's age. I thus acquired early in life a very solemn and sanctified appearance.

At different times, on visits and on vacation trips, I noticed that other travelers among the ladies, getting acquainted with my wife, would take it for granted that I was a minister and would immediately launch into fervid conversations about the beauties of a religious life, etc., and generally wind up with asking her at what place I preached. The younger women, looking upon my comely countenance, and noting my ministerial air, made no bones of coming to me for answers to all kinds of questions, and they opened their hearts to me in an amazing way. In the long waits between trains at the stations this afforded much pleasure, and the only drawback was the stern and unrelenting eye that my wife fixed on me when she inquired how it happened that I knew so many young women in every station we stopped at.

Now for the side-line part of this story. In various purchases made in different towns along the route of our travels, I noticed that the clerks always quoted me the usual price, and then, with an air of kindness, knocked off a quarter or a half dollar on every purchase of a dollar or two, with the remark that "to you the price is so and so."

I took the goods, pocketed the money, and kept still. I suspected that it was my looks that got the reductions, but I did not dare to ask, till finally the answer came from a man who had sold me several fine shirts. He finished up the transaction by knocking off a very liberal amount, remarking that it was customary to sell their goods at cost to ministers.

Since then I have preserved this suit with care, and periodically I brush up the good old stovepipe hat. When my wardrobe gets below zero, and I feel it is necessary to replenish it rather liberally, I get out the suit and all the accessories, hie me to the nearest big town, and there I save many a dollar in buying supplies. And there also I take pleasure in walking many a block with some gentle maiden, trying to direct her to some store or place I never heard of before just because she has pinned her faith to my looks!

It's a great side-line, and I feel for you, my friends, when I recognize the impossibility of your using it to advantage.

MAN-AFRAID-OF-HIS-NAME.

HERR BODEMANN DOESN'T AGREE WITH US.

To the Editors:

Don't feel hard if I read the BULLETIN with an eye on the wing, and tell you when I think you are wrong according to my notions.

1. Look at the last line in the second column of page 240 of the June BULLETIN. How does your contributor, Mr. Kalliwoda, figure out a percentage profit of 38.5? Did you think because he was figuring on a hair-raising tonic you could afford a hair-raising bull of this kind?

2. Now for your editorials on pages 226 and 227 of the June BULLETIN. I for one have never given any mercantile agency any figures whatever of my standing; don't know how I am rated, if at all, and don't give a damn. I have seen too many instances where high-priced credit men were fooled by the rating given on first-class risks, and so I pass these so-called raters up. The raters come around, in earning their wages, about so often —and get no explanation whatever from me. If mercantile houses don't want to trust me, that's their business, and it doesn't bother me in the least. I don't approve of your calling those who feel as I do hard names! A few years ago a fellow who sailed under my name, but who gave a West side store address, soaked some of the largest houses—some of the most conservative houses—to the tune of $35,000. And these houses had high-priced credit men, were subscribers to Bradstreet and Dun, and did not know where they were at —until they began to "Dun" me, and then they learned that they had been "dun" badly. That's why!

Even if I am a foolish man, for doing as I do, does not paragraph 1913 of Article 22½ of the U. S. Constitution vouchsafe me the happiness of making a fool of myself if I want to?

WILHELM BODEMANN.

Chicago, Ill.

[NOTE BY THE EDITORS.—To this characteristic roast from Herr Bodemann we may briefly reply as follows:

1. The percentage of profit mentioned in Mr. Kalliwoda's article was, through a typographical mistake,

given as 38.5 instead of 385. The decimal point was misplaced—that's all.

2. We certainly do not agree with Mr. Bodemann about refusing all information to credit-rating agencies like Dun and Bradstreet. Nowadays practically all business is done on credit, and a merchant whose rating is not given or known need not be surprised if he meets with all sorts of difficulties. He cannot blame jobbers, manufacturers, and others if they refuse to give him credit, or at least subject him to embarrassing questions. Mr. Bodemann himself is so well known that his case is not a characteristic one at all. His reputation is so much a matter of common knowledge that no one would refuse him credit. The mere fact that a man using his name secured so much credit is no argument against the skill of credit men nor the value of credit information. The credit men were simply taken off their guard—that's all. They thought there was only one Wilhelm Bodemann, and without troubling to look up the facts they assumed that he was worth anything up to a million dollars!]

THE GRADUATION PREREQUISITE IN NEW JERSEY.

To the Editors:

I beg to direct your attention to your article "Prerequisite in New Jersey," May issue, page 180.

In connection with this I want to say that you have been misinformed as to the facts. You lay the cause of the failure of our graduation prerequisite bill to the doors of, as you state, "two rival institutions." This is altogether wrong.

As dean of one of the institutions accused, I assure you that there was not one person present representing our college at the hearing before the Legislative Committee. Furthermore, both institutions have been and are now a unit in the quest of the prerequisite idea.

The opposition arguments were not conducted by any person connected with either institution. Any unfavorable impression made upon the committee was caused by arguments against the bill by people who themselves are pharmacy graduates, and one of whom at one time was even a member of the Board of Pharmacy of New Jersey.

I hope I have removed the stigma from the colleges in New Jersey that you have inadvertently placed upon them, and I will at the same time ask you to state in your next issue that the colleges of pharmacy in New Jersey are a unit on the graduation prerequisite in New Jersey.

During the past session of the legislature of New Jersey, Senate Bill Number 305 was passed by both houses and signed by His Excellency Gov. Woodrow Wilson. This bill establishes as a prerequisite a definite entrance requirement for all the colleges of pharmacy in the State, under the supervision of the State Board of Education. We hope this will prove to be the means of removing the opposition to the graduation prerequisite.

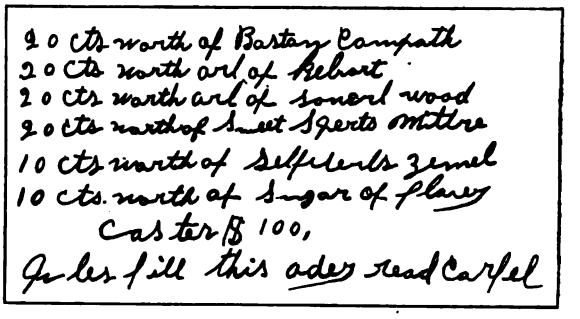
HERMAN J. LOHMANN,
Dean, Department of Pharmacy, University of the State of New Jersey.

Jersey City.

TRY A HAND AT THIS ONE.

To the Editors:

The accompanying order was taken to several stores, and finally it landed in the pharmacy of Mr. Williams, Goldsboro, N. C. Mr. Williams' very efficient prescription clerk, Mr.



Henry Brown, succeeded in giving the customer exactly what he wanted. I suggest that you reproduce this order in the BULLETIN and see if other readers of the journal can figure it out.

JAMES W. COPPEDGE.

TO "FIX" PAINT ON OIL-CLOTH.

To the Editors:

I notice that "H. L. S." in the May BULLETIN asks for a paint for oil-cloth. If he will "size" the oil-cloth first by rubbing it quite thoroughly with a rag soaked in turpentine, the paint will not "creep."

S. S. ELLIS.

Sergeant Bluff, Iowa.

To the Editors:

I like the BULLETIN OF PHARMACY better than any other drug periodical that I ever have taken, and my clerks think as I do.

T. R. DUNN.

Neches, Texas.

THE SODA FOUNTAIN.

"HOW TO OPERATE A SMALL SODA FOUNTAIN ON A MONEY-MAKING BASIS."

Charles L. Berry recently contributed a prize paper to *The Soda Fountain* on this subject. It was full of helpful hints for dispensers. He said:

Three essentials must be emphasized in discussing "How to Operate a Small Soda Fountain on a Money-Making Basis"—and the first of these is *cleanliness.* This means a clean fountain, clean glasses and clean dispensers. Not only must all be clean, but this cleanliness must be made the key-note of the advertising of the fountain.

Have your window strips changed frequently, and emphasize these facts:

That you have a sanitary fountain.

That you use only sterilized glasses.

That your syrups are drawn from thoroughly clean receptacles.

Never let the counter remain sticky—clean it with a damp cloth or sponge and rub dry with a towel.

THE SECOND ESSENTIAL.

Good syrups and fruits. Do not depend upon the boy to make the syrups; the least you can do is to oversee every step in the process.

As chocolate is the big seller at every fountain a good formula for chocolate syrup will not come amiss here. But in making chocolate syrup never lose sight of the fact that there is almost if not quite as much in the preparation of the syrup as there is in the materials used. Here is a good formula:

Fountain chocolate	8 ounces.
Granulated sugar	5 pounds.
Water	40 ounces.
Extract vanilla	4 ounces.

Mix the chocolate and the sugar, put the water in a gallon container and boil. After the water comes to a boil add the mixture of chocolate and sugar and stir constantly over the fire for 15 minutes. Then add the extract of vanilla and enough rock candy syrup to make a gallon.

In serving chocolate always add a couple of tablespoonfuls of sweet cream to the glass, and always stir with a spoon before using the fine stream. The addition of the sweet cream improves all soda with the exception of phosphates or syrups containing acids.

BE LIBERAL.

Don't be parsimonious with your syrups, as I have found in my many years of soda experience that the average American has a sweet tooth and likes his soda rather sweet. This is especially true of the ladies. Try and have your customers go away satisfied. If they leave soda in the glass or part of the sundae in the cup find out what was wrong with it. Ask if it was too sweet or not sweet enough, and *make it right.* Never let a dissatisfied customer leave your store.

Have a good variety of drinks and fruits so you can satisfy every customer. Americans are fond of variety and are of many tastes, and to these you must cater to succeed. Have all the popular crushed fruits, and run a special now and then—but when you do let the people know you have it by window signs, strips, or the use of a blackboard. There is always some one around an establishment who can do a little amateur sign painting, but if there is no one, call in outside talent even if you have to pay 50 or 75 cents. It is always money well spent.

Use fresh fruits in season, and sometimes a little out of season.

Nut sundaes have become "quite the rage," and they must be served in several ways. Walnut with maple is the favorite at most fountains, but many people like nuts in other combinations, and sweet, ground nuts should be kept on hand for these customers.

In serving chocolate sundae always use the dark thick syrup. A good way to serve this favorite is to have the chocolate heated in a chafing dish and pour it hot over the ice cream. It becomes solidified and gives the sundae the appearance of being iced like a chocolate cake. Always use the chocolate marketed under the name of "special dark."

Lemon is another hot weather favorite. Do not try to make a cheap lemon by grating the peel and adding acid to get the required degree of sourness—take fresh lemons and squeeze the juice, using 12 ounces to the gallon of rock candy syrup.

THE THIRD ESSENTIAL.

Good service. The soda must not be served by every Tom, Dick, and Harry about the place. The dispenser should know how to serve a customer. When we talk of a small fountain we do not think of the professional soda dispenser. He is an adjunct of the larger fountains. We mean the soda should be served by a clerk and not by a porter or store roustabout. The service should be prompt. The present-day American is a hurry-up personage and must be served rapidly, yet carefully.

See that the clerk is equipped with a spotless coat and apron, that he has a clean collar, shirt, and hands. Never allow the clerk to serve a customer and then disappear behind a prescription case or the cigar stand. The average buyer often wants another drink, and he will not bother to call the clerk, but will walk out without ordering for the second time, and the fountain will be out just that much revenue. This is especially true when two or more are together at the fountain and one of them wishes to reciprocate, as he has just enjoyed a drink paid for by the other fellow.

The greatest income from the American saloon can be traced to the treating habit. Why should not the soda dispenser take advantage of this trait in his customers and reap his just dues?

Have your drinks cold, and in warm weather keep a bowl of cracked ice near at hand and put a little in every drink you serve, especially the flat drinks and phosphates. You will find that the most frequent kick at the fountain is that the drink is not cold enough. Ice is cheap, and a bowlful shaved in the morning will last nearly all day.

So there are the three essentials—*cleanliness, good fruits and syrups* and *good service.* Let the people know that you insist upon all three.

SOME FOUNTAIN PLACARDS.

"Soda, as cold as ice can make it."

"Chocolate—made right, served right, tastes good, 5 cents."

"Weather 95 degrees—Our Soda 34 degrees."

"We have your favorite drink at our fountain and we serve it just as you like it."

"A lemon phosphate will touch that thirsty spot, 5 cents."

"Sundaes—Plenty of ice cream, plenty of fruit, 10 cents."

"Ice cream soda—deliciously flavored, deliciously served—ever try ours?"

"What will you have? A cherry sundae with rich, red cherries? 10 cents."

"Are you thirsty? It's only a few steps to the fountain."

"Chocolate ice-cream soda. Sounds good, but tastes better. 10 cents."

"A drink for every fancy. At the fountain."

"All that's latest—all that's good—at the fountain."

"Egg drinks! Fresh eggs—pure fruit syrups—good, rich cream and plenty of ice."

"Orangeade! Yellow as gold and just as good."

"If you appreciate good soda you'll appreciate ours."

FOR PREPARING LEMON BEVERAGES.

We realize many of our readers are familiar with the lemon, its use, and the various methods of producing good syrup from the fresh fruit. But it will not be out of place if, for the benefit of new dispensers, we devote some space to the subject. E. F. White has had considerable experience in the various methods of handling lemons at the fountain and tells about them in *The Spatula*. To quote:

LEMON JUICE.

It is always well to keep lemon juice on hand in a squirt-top bottle. Lemon juice, to be kept in this way, should immediately after expression be run through a fine strainer to remove the pulp and seeds, etc., and then filtered through paper. Juice thus prepared will keep fresh for several days. A dash or two of this juice is quite an addition to many plain and fancy drinks, and is also convenient for serving seltzer and lemon or similar drinks.

LEMON SYRUP FROM THE FRUIT.

Select from 8 to 12 fine, juicy lemons, according to the size (I generally find a dozen of the average lemons are none too many, although a good syrup may be made from less). Grate six or eight of them, taking care to grate only the yellow part of the rind, into a good-sized mortar. Over the gratings pour half an ounce of alcohol and rub for a few minutes with the pestle to cut the oil. The alcohol can be omitted if desired, but in either case proceed as follows: Add 4 ounces of sugar to the gratings and rub thoroughly with the pestle so that the sugar may absorb the oil. If needed, more sugar may be added. Over this pour the lemon juice which has been previously expressed and add 1 ounce of solution of citric acid. Let this stand over night if possible, and after straining through a double thickness of cheese-cloth, add enough simple syrup to make one gallon.

LEMONADE SYRUP.

Occasionally some one desires a method for preparing lemonade and wishes to have a syrup for the purpose. This can be done by adding the juice of 30 or 40 lemons to a gallon of lemon syrup prepared as indicated in the foregoing. More or less lemons may be used according to the strength you desire the lemonade to be. Unless this syrup can be used up each day it will be best to filter the juice.

MINERAL WATER LEMONADES.

You will often have calls for lemonades made from the various mineral waters, therefore you should be prepared to dispense them. They are prepared in the same way as a plain or soda lemon, depending upon whether plain or carbonated water is used. All that you have to do is to keep a bottle or two of the various mineral waters on hand.

DRAWING THE LEMONADE.

Into a 12-ounce glass draw from 1 to 1½ ounces of simple syrup. Into this squeeze the juice of one fair sized lemon, and fill the glass one-third full of finely shaved ice. For plain lemonade fill the glass full of pure, clear water, and shake thoroughly. For soda or other charged water lemonade fill with the desired water and mix with a spoon. Decorate with a slice of lemon or any other fruit that you may have on hand.

MAKING ICES.

"Water ices," says the *International Confectioner*, "are by far the simplest to make, and in the summer are even more refreshing than ice cream if properly made. Most of them are too sweet and insipid, while others lack the distinct fresh fruit flavor. Berries, citrus fruits, and pineapples lend themselves to best advantage in making ices. The mistake most prevalent in making ices is that they are raised or swelled as ice cream should be. To prevent this, run the freezer at very slow speed, and use double the amount of salt, so that the batch will have a good body. A quart of unsweetened condensed milk will improve the body also, if added to a five-gallon batch.

"To get a fruit acid in solution so that the exact quantity can always be used, place two pounds of citric acid crystals in a half-gallon jar and fill with filtered water. Shake this occasionally so that all will be dissolved when it is ready for use.

"As a filler for ices, white of eggs may be used instead of gelatin. They must be beaten enough to break up the stringy property and mixed with the batch before it is strained. Eight egg whites should answer for a ten-gallon batch, or one ounce of egg albumen soaked over night in enough water to cover it will be equivalent, and is used the same way as the fresh whites of egg. On the other hand, use half as much gelatin as you would for the same sized batch of ice cream; for instance, a ten-gallon batch of cream is made up of five gallons of material, and we use, say, four ounces of gelatin, but the ices being frozen without the raise or swell will give only five and one-half gallons in the result from the same quantity of mix. Hence less filler is required. French ice cream needs no filler, as it is not to be raised; in fact, if too much body is used, the cream will be so heavy that it will cause trouble in packing.

"If it is not possible to get reduced speed from the motor in use, have the blades on the dasher cut off close to the center and then retin the whole to prevent rust. It is these blades which beat up the material, and if removed the result will be similar to the French or centrifugal freezer.

"Ices are made in the proportion of one quart of water to one pound of sugar, on the average, the sugar used in the fruit being figured in the batch, and to each gallon one fluidounce of acid solution. An idea of this can be gained from the following example of five gallons:

LEMON ICE.

Eighteen quarts filtered water.
Eighteen pounds granulated sugar.
Eighteen lemons.
Five fluidounces acid solution.
One ounce gelatin, or whites of four eggs.
One quart unsweetened condensed milk. (Optional.)

"The lemons are first prepared by grating the rind and mixing it with two pounds of the sugar, allowing it to stand over night to draw the flavor. The water is then heated, and when it is nearly to a boil, remove it from the fire and add the sugar, stirring till dissolved, then the sugar in which the lemon rind is grated, and then the gelatin; cool this and add the juice of the lemons and the rest of the ingredients, strain, and freeze.

"Orange ice is made after the same formula, substituting oranges for the lemons, and adding orange or yellow color to suit the taste.

"Berries used in ices need not be prepared with sugar as for ice cream, and less sugar is to be used, probably twelve ounces to the quart of batch according to the sweetness of the berries, and fruit acid to suit the taste. The acid will accentuate the flavor if used judiciously, and when the proper proportion is had it should be noted so that the amount is always used.

"When coloring ices be particular to color the batch before adding the acid, else a pronounced bitterness will appear, due to the action of the acid on the color; but if it is first colored, the dilution will be great enough to nullify the effects when the acid is added. The chief trouble on this score will be found in orange, regardless of the brand, as all certified colors are made of the same basic material, but if the above directions are followed, little or no trouble will be experienced.

GRAPE ICE.

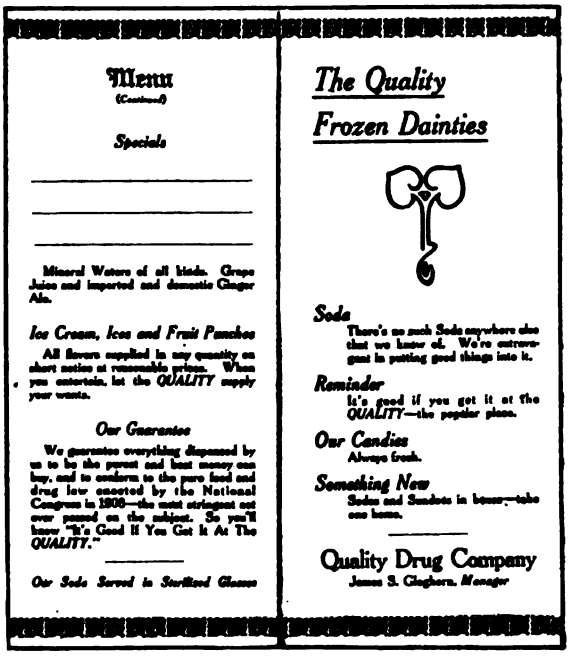
"Grape ice is increasing in popularity, being made on the same principle as orange or lemon, and using about four to six ounces of the juice to a quart batch. Color with a blend of red and violet colors to simulate the natural color of the fruit juice.

"When it is desired to incorporate the fruit in the ices, either sliced or crushed, the juice should be drained off and frozen with the batch, and the fruit added afterwards; else when the batch is in liquid form the fruit will settle to the bottom. Another way to mix it thoroughly is to remove the cover from the freezer after the batch is nearly frozen and add the fruit, then putting back on the machine to finish.

"The shade of color desired will be a matter of experiment, for the shade changes after the batch is frozen, some getting darker and others lighter. It is best to study this for proper results."

A NEAT SODA MENU.

James S. Gleghorn, manager of the Quality Drug Company of Waynesburg, Pa., sends us one of his soda menus. The paper is a light tan, the ink purple,



The cover pages of Mr. Gleghorn's soda menu.

making a very pretty color combination. The inside and outside pages are seen in the accompanying etchings.

It will be noticed from the cover that Mr. Gleghorn is selling sodas and sundaes in boxes. Other

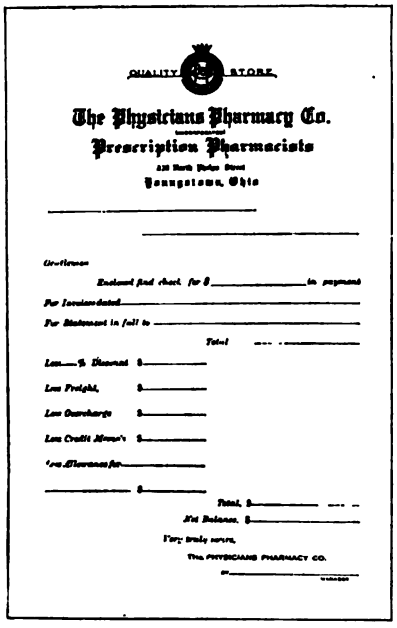
The inside pages of Mr. Gleghorn's soda menu.

druggists have tried that scheme and say it works out very well. The people in the vicinity soon acquire the habit of taking home a few ice-cream sodas to their families and friends.

BUSINESS HINTS

Two Specimens.—

The Physicians' Pharmacy Co. of Youngstown, Ohio, has a remittance blank for paying bills that


QUALITY STORE

The Physicians Pharmacy Co.

Prescription Pharmacists

Youngstown, Ohio

Gentlemen

Enclosed find check for $ _____ in payment

For Invoice dated _____

For Statement in full to _____

Total

Less ____% Discount $

Less Freight, $

Less Overcharge $

Less Credit Memo's $

Less Allowance for

$

Total, $

Net Balance, $

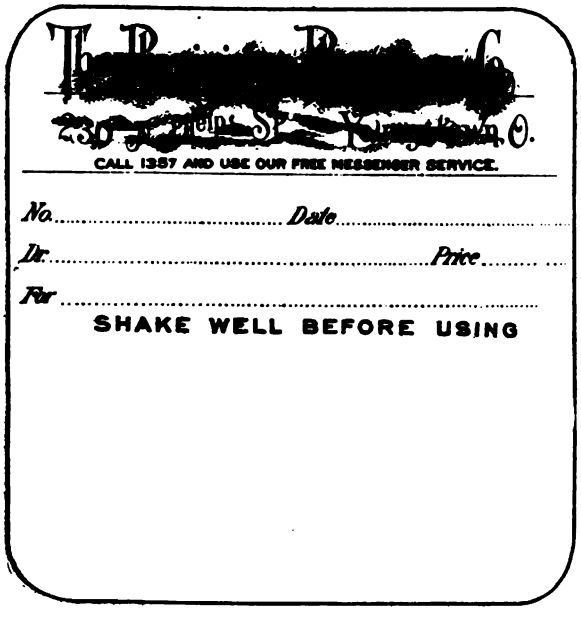
Very truly yours,

THE PHYSICIANS PHARMACY CO.

By _____

A remittance blank used by the Physicians' Pharmacy Co.

leaves little room for misunderstanding on the part of the recipient. It indicates just what deductions have been made. Full data of the invoice are given,



A prescription label for typewritten directions.

as may be seen from the accompanying reproduction of the blank. The original is 6 by 9½ inches.

A neat label is employed by this firm for prescriptions. We are reproducing it in the original size. The directions are typewritten, completing a very presentable package.

Co-operating with Good Housekeeping Magazine.—

It seems the *Good Housekeeping Magazine* is giving special attention to the different kinds of goods that are consumed in the household. With Dr. Wiley as contributing editor this journal is in a position to serve the public in an advisory capacity and indicate the different products that are wholesome in their composition. Owen Raymo, of Wayne, Mich., along

A reproduction of the two inside pages of the folder distributed by Mr. Raymo.

with scores of other druggists, is making capital out of *Good Housekeeping's* campaign. He distributes a four-page folder intended to attract buyers. The products mentioned bear the guarantee of *Good Housekeeping*, as may be seen from the two inside pages shown in the accompanying reproduction. The dimensions of the original circular are six by nine inches.

Never Say, "Is That All?" to Your Customer.—

"Is that all?" The customers winced. It was almost imperceptible, yet they winced, and to the close observer it was easily seen that the words made them feel uncomfortable. They had purchased a small article in the drug store, and the words fell on their ears in a manner that indicated that the salesman was surprised that they were not going to buy anything else.

Haven't you noticed it? says L. C. Wareham in *The Pill.* Don't you remember how harsh the words sounded to you? Made you feel sort of ashamed that your purchase was a five-cent one of salts, castor oil, etc., and that you were taking up the salesman's time and that you ought to feel indebted to him, didn't it? The man behind the counter in this instance evidently didn't mean to be discourteous, but he was.

"Now, is there anything else?" Try this phrase and see how much better it is, after waiting on a customer, to gently lower the voice, incline the head slightly and say with a pleasing expression, while looking at your patron: "Now, is there anything else?" And remember not to say, "Is that all?"

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Astute Annotations.—

A German patent says that hydrogen peroxide is rendered stable by the addition of at least 10 per cent of alcohol.

Rubber sheets, bands, etc., are said to have their strength and elasticity increased by exposure to ultra-violet rays for a short time.

Seeds soaked in formaldehyde solution, then heated, are distributed through cultivated land for the purpose of destroying insects, according to an English patent.

The hot gases which issue from volcanic grounds in Tuscany are found to be strongly radioactive and to possess considerable electrical energy.

The manufacture of synthetic sapphires, from oxides of aluminum, iron, and titanium, which are claimed to have the same color, transparency, and hardness as the natural stones, is the subject of a recent patent.

Formaldehyde in solution acts as a poison to plants, but when plants are exposed to formaldehyde gas in minute quantities it is found that starch is formed directly from the formaldehyde.

About one-eighth of the energy of metabolism is furnished by the liver and one-twelfth by the kidneys.

Frogs were found to be affected by colchicine 50 times as much at 98° F. as at warmer temperature.

The sense of smell is rendered more acute by the administration of strychnine, and also by cocaine, in its first action.

One gramme of radium produces 0.1 cubic millimeter of helium per day under normal conditions.

Metallic sodium, enclosed in iron tubes, is proposed for a conductor of electricity in place of copper.

The violet end of the spectrum gives the best light for near objects, and the red end for distant objects, for distinct vision.

When boiled in a one-per-cent solution of colloidal silver, wool and silk are dyed brown, and cotton is dyed yellow. The colors are nearly permanent.

The average yearly production of nux vomica seeds in India is estimated at four million pounds, and valued at $100,000. The United States uses more of them than any other country.

THE RECENT MISSISSIPPI FLOODS.—Among the places that suffered from the recent overflow of the Mississippi River was Arkansas City, Arkansas. In Dedman's Drug Store, which is located on the bank of the river there, the water was thirty inches deep. J. A. Still, the manager, says it was necessary to suspend business for over two weeks.

THE RECENT MISSISSIPPI FLOODS.—Here is another view of country that suffered from the recent Mississippi overflow. The half-tone is reproduced from a post-card sent to us by the People's Drug Store, Plaquemine, La. It shows the condition of the river front there after the storm and during high water. The one-story structure on the left was wrecked.

Pure gelatin has only about half the gelatinizing power of a gelatin-containing salt, and the jelly is moré opaque.

Zirconium oxide is recommended as a dusting powder for protecting wounds, etc., and also as a substitute for bismuth salt in *x*-ray work.

Diamonds—very minute ones—have been made by reducing illuminating gas with mercury at a temperature of 100° C.

Radium salts are readily absorbed by colloidal substances, and are more soluble in weak solutions of colloids (gums, etc.) than in pure water.

Profitable Sickness.—

R. C. Treat says that ambergris is caused by pieces of cuttlefish beaks which are swallowed by the sperm whale, and which cause an irritation in the intestines, and this, in turn, causes a secretion to form around the piece of bone. The beaks of cuttlefish are always found, he states, in unbroken lumps of ambergris. Lumps of ambergris have been found weighing from 130 to 274 pounds.

Colloidal Explanations.—

J. Hoffman claims that the color of ultramarine is due to the presence of colloidal sulphur rather than to a definite chemical compound. Yellow, brown, and green ultramarines are produced by adding boron or selenium or tellurium to ultramarines, but the color does not depend either upon the particular one which is added or on its amount, except in part.

Don't be Slow!—

H. Schade thinks that gall-stones are formed by the very slow deposit of colloid emulsions. When colloids are mixed very slowly, drop by drop, they tend to form crystalline spherical masses, the larger stones being deposited the more slowly.

Stay, Bill!—

The decomposition of glycerophosphates by water is first increased then decreased by acids, according to the amount present. The most stable form is that in which enough acid is present to correspond to an acid-glycerophosphate. Heat also favors decomposition.

BOOKS

A Book on Pharmaceutical Bacteriology.

At the present time nearly all of the leading colleges of pharmacy give instruction in bacteriology. In many of these institutions the courses are compulsory, forming a part of a prescribed curriculum. Not infrequently the lectures are supplemented by laboratory work, although students of pharmacy do not always have time to devote themselves to special laboratory methods and technique. There has developed, therefore, a course on what we might term pharmaceutical bacteriology, a study that is suitably adapted to the needs of the pharmacist.

Albert Schneider, M.D., Ph.D., has just brought out a book entitled "Pharmaceutical Bacteriology," bearing especially on the subjects of disinfection and sterilization. It aims to give the druggist a fair knowledge of general bacteriology, in order that he may comprehend quite fully the significance of these minute organisms in pharmaceutical practice. He should know what pharmaceutical preparations and what medicinal substances are likely to be attacked by bacteria, and what changes they are capable of producing in such substances. He should be qualified to sterilize his pharmaceuticals. He should know something of disinfectants and antiseptics.

To give druggists a knowledge of such things has been the aim of Dr. Schneider in this volume. The book is well edited and handsomely illustrated. It gives the student a general knowledge of phagocytosis, of leucocytosis in inflammatory processes and in pus formation. The chapter on immunity is extremely interesting. Several pages are devoted to bacterial vaccines, enzymes, opsonins, and antitoxins. The various hygienic measures which should be known to a druggist are also described.

"Pharmaceutical Bacteriology" is published by P. Blakiston's Son & Co., Philadelphia. The price is $2.00 net.

Microscopy.

"Microscopy and the Microscopical Examination of Drugs" is the title of a new book by Charles E. Gabel, B.S., Ph.D. Dr. Gabel is Microscopical Food and Drug Analyst for the Iowa State Dairy and Food Commission, and is therefore well equipped to produce a work of this character. He attempts to simplify, condense. and present the fundamentals of microscopy, a very laudable purpose, since the importance of microscopy and microscopical methods has greatly increased in recent years.

Dr. Gabel's book is intended especially for the use of the pharmacist and medical student. It practically covers the work for microscopy and histological pharmacognosy as suggested by the National Committee in the Pharmaceutical Syllabus. It serves also as an introduction to the various microscopical studies and methods used by modern physicians, health officers, and pure food and drug men. There are 115 pages bound in cloth. The book is published by The Kenyon Co., of Des Moines, Iowa.

A Book on Commercial Pharmacy.

D. Charles O'Connor, at one time a retail druggist in Fitchburg, Mass., but now in the employ of F. F. Ingram & Co., is the author of "A Treatise on Commercial Pharmacy," published by the J. B. Lippincott Company of Philadelphia. The book is quite an ambitious one of nearly 400 pages. The text is divided into three main parts, devoted respectively to the establishment of a pharmacy, the management of a pharmacy, and the development of a pharmacy. Under each head are many subdivisions, so that in all there are exactly 50 chapters. Such important subjects are discussed as taking care of stock, figuring profits, establishing a bookkeeping system, the treatment of customers, the buying of goods, the selling of goods, advertising methods, window displays, special sales, booming different departments in the store, and the like. The volume is mainly intended as the analogue of treatises on dispensing pharmacy which are used as text-books in the schools, but it will be found of service also to the proprietor already in business who is anxious to reorganize and improve his methods. So far as we know, it is the first comprehensive book devoted to the subject of commercial pharmacy. The price is $2.50.

"Formulæ Magistrales Germanicæ."

This book corresponds in a way to our National Formulary. The formulas are of recognized value and aim in many instances to provide the apothecary with the recipes for what are called "factory-made proprietaries."

The arrangement is somewhat different from that of the American work. The formulas are classified into therapeutic rather than pharmaceutical divisions. The chapters are headed "diaphoretics," "disinfectants," etc., whereas in the National Formulary one section is devoted to elixirs, another to ointments, and so on.

The various preparations are made up of medicaments which clinical experience has shown to be of service in medical practice. In the preface the physician is urged to prescribe the preparations of "Formulæ Magistrales," showing that the N. F. and U. S. P. propaganda in America is characteristic of a movement world-wide in its scope. Apparently the same agitation goes on among the German apothecaries.

"Formulæ Magistrales Germanicæ" is published by the Deutschen Apotheker-Verein in Berlin.

Pharmaceutical Latin.

"Pharmaceutical Latin," by Julius William Sturmer, Phar.D., is now in its second edition. This book aims to present a course sufficiently extensive for the needs of American prescription practice, and at the same time in harmony with the Pharmaceutical Syllabus. The second edition has several improvements over the pre-

vious one. The article on prescription Latin has been considerably enlarged. The chapter on verb forms has also been made more complete, while the number of Latin exercises has been increased. In the back of the book is a brief Latin-English dictionary for pharmacists. This work is published by the author, J. W. Sturmer, and the retail price is $1.25. Dr. Sturmer is Professor of Pharmacy in Purdue University, Lafayette, Indiana.

Tanner on Poisons.

The necessity of printing another edition of this very popular little manual presented the opportunity for revision. Dr. Tanner has made several changes in his memoranda on poisons, including notes of several synthetics used as substitutes for morphine. The toxicology of poisonous foods is presented and antidotes given for all deadly chemicals. This book is published by P. Blakiston's Son & Co., of Philadelphia.

Report of the Missouri Botanical Garden.

The Twenty-second Annual Report of the Missouri Botanical Garden for 1911, by William Trelease, Director, St. Louis, Mo., has just been issued. The present volume is fully up to the standard set by earlier editions of the series which have been reviewed in these columns. Besides the reports of the Garden officials, it contains six scientific papers. Dr. Trelease himself has three papers on the genus Agave, illustrated with 86 plates, in which he describes and names 22 new species and one new variety. He has also one paper on Yucca, in which he describes two new species and three new varieties, illustrating the paper with five plates. Dr. C. S. Sargent describes 14 new species and one new variety of Cratægus from Missouri. Mr. David Griffiths describes 10 new species of the genus Opuntia, illustrating these with 17 plates.

Hampshire's Volumetric Analysis.

Any pharmacist who is called upon to do analytical work must depend to a great extent upon his knowledge of quantitative determinations. Charles H. Hampshire, B.Sc., A.I.C., of London, has recently written a book on volumetric analysis especially intended for druggists and students of general chemistry. Methods of estimating acids and alkalies are given together with percentage determinations of the more common metals. The work is published by P. Blakiston's Son & Co., of Philadelphia. There are 104 pages and the price is $1.25 net.

A Leading Southern Store.—One of the most remarkable retail businesses in the South is that of J. J. Schott, at 2015 and 2017 Market Street, Galveston, Texas. It is a common saying in Galveston and vicinity: "If you want anything unusual, go to Schott's for it!" He keeps an enormous stock, and physicians have grown to look to him for putting in the newer scientific products as fast as they are marketed. His prescription business is one of the big features of the establishment, and this department alone would satisfy the average druggist. From 250 to 300 prescriptions are dispensed daily. Every department in the store, however, is equally successful, and progress and growth are characteristic of the Schott business in every detail. Incidentally it may be remarked that Mr. Schott has the reputation of being the most distinguished follower of Isaac Walton on Galveston Island.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Hair Dyes.

W. P. M. wants a formula for a brown and a black hair dye. The following formula is said to stain the hair brown:

Nutgalls	50 grammes.
Water	300 grammes.
Ferrous sulphate	10 grammes.

Boil the nutgalls in the water, strain, in the colate dissolve the iron salt, and evaporate the liquid to two-thirds its original volume.

The following is said to yield a dye which stains the hair brown immediately upon application:

Gallic acid	10 grammes.
Ferric chloride	8 grammes.
Water	100 grammes.
Aectic acid	8 grammes.

Dissolve the acid and the ferric chloride in the water. Add the acetic acid shortly before applying. The hair must be thoroughly washed in order to deprive it of fat and dried before applying the dye.

White hair is said to be dyed brown by the following:

Red wine	120 grammes.
Ferrous sulphate	8 grammes.

Boil for one minute. Apply to the hair twice a week, and let it dry after every application until the desired result is obtained.

Black.—(*a*) Sulphate of iron, 10 grains; glycerin, 1 ounce; water, 1 pint. The hair must be thoroughly washed with this mixture, dried, and brushed once daily for three days; then the following preparation (*b*) should be applied, on a small-toothed comb, but it should not be allowed to touch the skin if the other preparation has done so, as a temporary stain would result: (*b*) Gallic acid, 4 grains; tannic acid, 4 grains; water, 1½ ounces. After the first application of formula (*a*) the hair should be allowed to dry, and then be brushed. Subsequently, both formulas may be used once daily, at an interval of an hour or so, until a black color is produced.

The silver hair dyes are harmless and quick in action. Here is a two-bottle preparation that is found in a reliable book:

NO. 1 BOTTLE.

Pyrogallic acid	½ drachm.
Sodium metasulphite	10 grains.
Water to make	2 ounces.

NO. 2 BOTTLE.

Silver nitrate	1 scruple.
Stronger ammonia water,	a sufficient quantity.
Water to make	2 ounces.

Dissolve the nitrate in ½ ounce of water, add ammonia until the precipitate is redissolved, and make up to 2 ounces with water.

Two-bottle hair dyes are put up in cases to hold a 1-ounce (No. 1) and a 2-ounce (No. 2), or proportionately larger bottles, with two short-handled toothbrushes of black and white bristle. The directions for use are as follows:

Cleanse the hair from all grease by washing it with warm water having a little washing-soda dissolved in it, and dry with a towel. Next pour a little of fluid No. 1 into a saucer and apply with the white-haired brush; immediately afterwards use No. 2 in the same way with the black brush, avoiding as much as possible touching the skin. Wipe the parts around the hair receiving the dye with a damp sponge, and do not wash or grease the hair for several hours after its application. It is preferable to apply the dye at night.

The more silver there is in the preparation, the darker the dye is. Five grains of nitrate to the ounce is the proportion for brown dye.

Some Interesting Incompatibilities Explained.

A. & Co. submits two prescriptions and asks that we discuss their incompatibilities fully. The formulas are as follows:

(1)	Calomel	15 grains.
	Sodium bicarbonate	20 grains.
	Powdered rhubarb	15 grains.
	Powdered potassium chlorate	15 grains.
	Aloin	5 grains.

Mix and make 12 capsules.

(2)	Quinine bisulphate	100 grains.
	Fowler's solution	2½ drachms.
	Syrup of orange peel	2 ounces.
	Water to make	4 ounces.

Mix and make solution.

Our correspondent asks, referring to prescription number 1: "Would the calomel and potassium chlorate form bichloride of mercury, and if so, in what proportions. In number 2 the Fowler's solution appears to throw down the quinine bisulphate. Why does this take place? A small quantity of dilute hydrochloric acid will redissolve the quinine, but is not this addition likely to precipitate the arsenic in the Fowler's solution?

"Do you consider it safe for a druggist to dispense these prescriptions? Is it ever wise to send out a prescription in which are both Fowler's solution and one of the common acids?

"Kindly suggest a complete work on incompatibilities and give the name and address of the publisher."

In prescription number 1, there would be no reaction while the powders were in a dry form. When taken into the stomach the potassium chlorate with the hydrochloric acid of the gastric juice would undoubtedly oxidize the calomel, forming mercuric chloride. This change would take place slowly, and possibly the drugs would pass out of the stomach before it could develop. Ruddiman says, about a very similar prescription, that "when the calomel and potassium chlorate were mixed with a 4-per-cent solution of hydrochloric acid and the mixture allowed to stand for some time, tests for mercuric chloride could be obtained. Although this may be considered a rather dangerous prescription, it has been filled and taken without apparent effect." From this we should judge the chemical change was more theoretical than actual.

In "Scoville's Art of Compounding" the statement is made that sodium bicarbonate with calomel forms corrosive sublimate, the change not taking place within four to six weeks, so that, except under unusual conditions, any prescription would be used before mercuric

chloride is formed. It is a very common practice of physicians to direct the use of these two chemicals together, and no ill effect seems to have resulted.

Passing now to prescription number 2, precipitation is of course due to the excess of potassium carbonate, quinine alkaloid being precipitated, which our querist redissolves with hydrochloric acid. In making the Fowler's solution, an excess of potassium bicarbonate is used in dissolving the AS_2O_3. On boiling the AS_2O_3 goes into solution as potassium arsenite, and the excess bicarbonate is converted into carbonate. The trouble is therefore due to the carbonate and not the arsenic. The hydrochloric acid puts the quinine back into solution and also makes a good solvent for the arsenic instead of precipitating it. Some effervescence is noted, due to the decomposition of the carbonate. To avoid any difficulties, we call our querist's attention to the two official arsenic solutions, both of which contain 1-per-cent AS_2O_3. But Fowler's solution is alkaline while the solution of arsenous acid is acid. If our querist will use the latter in his prescription, he will have no trouble to contend with, and in my opinion would not be taking any undue liberties with the physicians. It is up to the druggist to correct such an incompatibility in a physician's prescription.

A complete work on "Incompatibilities" is a book by that name published by John Wiley & Sons, New York and London. The author is Edsel A. Ruddiman, Ph.M., M.D. There are 312 pages. The price is $2.00 in cloth.

Lacquers for Brass.

C. F. S. writes: "I want the formula of a preparation to prevent brass from tarnishing. I believe such a product is used by manufacturers of brass beds, the brass being coated with it after it has been polished to protect the metal from air and moisture."

Here are five formulas of lacquers for brass:

1. Seed-lac, dragon's-blood, annatto, and gamboge, of each 4 ounces; saffron, 1 ounce; alcohol, 10 pints.
2. Turmeric, 1 pound; annatto, 2 ounces; shellac and gum juniper, of each 12 ounces; alcohol, 12 ounces.
3. Seed-lac, 6 ounces; dragon's-blood, 40 grains; amber and copal, triturated in a mortar, 2 ounces; extract of red saunders, ½ drachm; Oriental saffron, 36 grains; coarsely powdered glass, 4 ounces; absolute alcohol, 40 ounces. Very fine.
4. Seed-lac, 3 ounces; amber and gamboge, of each 2 ounces; extract of red saunders, ½ drachm; dragon's-blood, 1 drachm; saffron, ½ drachm; alcohol, 2 pints 4 ounces.
5. Turmeric, 6 drachms; saffron, 15 grains; hot alcohol, 1 pint; draw the tincture, and add gamboge, 6 drachms; gum sandarac and gum elemi, of each 2 ounces; dragon's-blood and seed-lac, of each 1 ounce.

The following precautions should be observed:

1. Be sure there is no oil or grease on the brass; do not touch the work with the fingers; hold it with spring tongs or a taper stick in some of the holes.

2. Always handle with a piece of clean cloth.

3. Heat the work so hot that the brush will smoke when applied, but avoid overheating, as it burns the lacquer.

4. It is well to fasten a small wire across the lacquer cup, from side to side, to scrape any superfluous lacquer. The brush should have the ends of the hairs all exactly even. If not so, trim the ends with sharp scissors.

5. Scrape the brush as dry as possible on the wire, making a flat smooth point at the same time.

6. Use the very tip of the brush to lacquer with, and carry a steady hand.

7. Put on at least two coats. It is well, to make a very durable coat, to blaze off after each coat with a spirit lamp or Bunsen burner, taking care not to overheat and burn the lacquer.

8. If the lacquer is too thick, it will look gummy on the work. If too thin, it will show prismatic colors. In the first case add a little alcohol; in the latter, set the cup on the stove and evaporate some.

9. Avoid handling lacquered work until cold.

Soluble Wash Bluing.

S. D. F.—The following is said to make one of the best wash bluings known, and when prepared in quantity is very cheap: Dissolve 217 parts of potassium ferrocyanide in 750 parts of distilled water, and to the solution add sufficient water to make in all 1000 parts. In another vessel dissolve 100 parts of ferric chloride in sufficient distilled water, and bring the solution up to 1000 parts as before. Make a cold saturated solution of sodium sulphate in distilled water, and of the solution add 2000 parts to each of the two iron solutions (making 3000 parts of each). Now add the chloride solution to the ferrocyanide little by little, under constant stirring. After the last of the ferric chloride is added continue the stirring for some time. Filter off the liquid and wash the residue on the filter with distilled water until the wash water comes off a deep blue color. After washing, spread the mass out to dry, either at ordinary temperature or by artificial heat. When dry, a lump of this substance, which is soluble Prussian blue, breaks with a fine, bronze-colored fracture. It is completely and easily soluble in water, hot or cold. With the addition of a little mucilage it makes, when dissolved in water, a beautiful blue ink, and may be also used for hand-stamp ink. As a laundry bluing it is said to leave nothing to be desired either in cost or quality.

Boards which Exchange Certificates.

H. H. T.—A full list of the secretaries of the different boards of pharmacy throughout the country was published in the BULLETIN OF PHARMACY for July, 1911, page 306. If you do not happen to have a copy of this particular issue, the publisher will doubtless be able to send you one at the customary price of ten cents. You ask also about the list of the States which interchange certificates with one another. It is very difficult to give this information for the reason that the boards are constantly changing their requirements. If you will write the secretary of the board of that particular State in which you desire to practice, he will give you all the information required.

Back in the BULLETIN OF PHARMACY for February, 1909, on page 84, we gave a list of pharmacy boards which at that time accepted the certificates of other boards, and another list of those which accepted college diplomas in lieu of examinations. The information printed on that occasion may be of some use to you, although, as we have already stated, it is not up to date, and the situation may now be somewhat different.

Stock Dip and Lice Killer.

W. D. Co. wants a formula for the preparation of a stock dip and lice killer.

The following formula for a sheep dip is recommended by the United States Department of Agriculture. It should be generally serviceable for stock:

Soap .....1 pound.
Crude carbolic acid.....1 pint.
Water .....50 gallons.

Dissolve the soap in a gallon or more of boiling water, add the acid, and stir thoroughly.

The following formulas have been approved by the British Board of Agriculture:

LIME AND SULPHUR DIP.

Mix 25 pounds of sulphur with 12½ pounds of good quicklime. Triturate the mixture with water to a smooth cream and transfer this to a boiler of 20 gallons capacity. Make up the volume with water to 20 gallons, boil and stir during half an hour, when the liquid should have a dark-red color. If yellowish, continue the boiling until the dark-red color is obtained, keeping the volume at 20 gallons. When the liquid is cooked decant off from any small quantity of insoluble residue and make up the volume to 100 gallons with water.

CARBOLIC ACID AND SOFT SOAP DIP.

Dissolve 5 pounds of good soft soap, with gentle warming, in 3 quarts of good crude carbolic acid. Mix the liquid with sufficient water to make 100 gallons.

Tartar Emetic; Oil of Wine.

J. S. submits two queries. He asks whether the pentoxide of antimony can be used instead of the trioxide in making tartar emetic. He also wants to know the difference, chemical and therapeutic, between light and heavy oils of wine.

The United States Dispensatory gives potassium bitartrate and antimony trioxide as the ingredients for the manufacture of tartar emetic. Without inquiring into the chemical possibility of using the pentoxide we say no to your query, for the reason that the resulting product is apt to be much more poisonous than if made in the usual way. We reason by analogy that since pentoxide of arsenic is far more toxic than trioxide, the same difference may hold true of antimony oxides. Better follow the official method for making tartar emetic and be safe.

The chemical differences between heavy and light oils of wine are described on page 827 of the last edition of the United States Dispensatory. On page 828 the medical properties of the heavy oil are given. We can add nothing to what is stated there.

Resilvering Mirrors.

J. R. M. wants a method for resilvering mirrors.

Clean the bare portion of the glass by rubbing it gently with fine cotton, taking care to remove any trace of dust and grease. If this cleaning be not done very carefully, defects will appear around the place repaired. With the point of a penknife cut upon the back of another looking-glass around a portion of the silvering of the required form, but a little larger. Upon it place a small drop of mercury; a drop the size of a pin's head will be sufficient for a surface equal to the size of the nail. The mercury spreads immediately, penetrates the amalgam to where it was cut off with the knife, and the required piece may be now lifted and removed to the place to be repaired. This is the most difficult part of the operation. Then press lightly the renewed portion with cotton; it hardens almost immediately, and the glass presents the same appearance.

Preventing Raised Checks.

B. & P. write us as follows: "Please tell us the best way to prevent our checks being raised. We do not care to spend $30 for a protectograph. Is there a check or paper that is safe?"

A protectograph is, of course, the best safeguard against raised checks. Many banks, however, supply checks with a design lithographed on a smooth surface so that any erasure shows up plainly. The Calvert Lithographing Company of Detroit and other houses can doubtless furnish you with such blanks. Again, some firms have an understanding with the banks whereby the amount of the check is written in red ink through the signature. That insures a certain amount of protection. Of course, the trouble lies in writing checks for such sums as five dollars or eight dollars where the bearer can change the amount to fifty or eighty.

Waxed Paper for Envelopes.

J. B. R. writes: "Can you give us any information as to the process of rendering paper transparent, similar to that used by the manufacturers of envelopes designed to show the name and address through the paper?"

This is probably waxed or paraffin paper. We do not know the process of manufacture. Possibly tissue-paper is run over a roller which is wet with paraffin oil. Why not buy it ready made?

An Orange Drink.

W. D. Co.—We do not know the composition of the proprietary preparation which you mention. The "Spatula Soda Water Guide" gives the following formula for an orange drink:

Orange syrup .....1½ ounces.
Juice of one-half lemon.
Ice, two-thirds.
Soda, sufficient.

Ice-cream Powder.

A. R. H.—We do not know the composition of the proprietary compound which you mention, but the following formula for ice-cream powder is found in the literature:

Powdered starch.....1 ounce.
Powdered sugar.....1 ounce.
Essence of almonds.....10 minims.
Essence of vanilla.....10 minims.

Mix well and sift.

This quantity is sufficient for a pint of milk, with which it is to be mixed, then brought to the boil, and when cold put in the freezer.

Other coloring and flavoring agents may be used if desired, according to the kind of ice cream wanted.

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THE MONTH'S HISTORY

THE STATE ASSOCIATIONS.

The State pharmaceutical associations occupy the center of the stage at this season of the year. Two or three of them are now meeting every week, and we find that certain reforms are being agitated by many of them with a good deal of unanimity. There seems to be a general movement, for instance, to secure legislation which, if possible, will very largely restrict the sale of patent medicines to druggists.

Out at the Iowa meeting the other day we were informed that the Board of Pharmacy, fortified by an opinion from the Attorney-General, had brought suit against certain grocers for the sale of proprietary medicines containing drugs mentioned in the pharmacy act. The Proprietary Association of America was defending at least one of the suits, and the association was therefore urging the advisability of adopting the new Freericks-N. A. R. D. measure, which would compel all patent medicines to bear on their labels a statement of the content of potent ingredients, and of alcohol beyond a certain percentage. Mr. Freericks' idea is that with such information on the label, the public need would be shown of having the sale of many patent medicines restricted to educated pharmacists, qualified to advise customers on professional matters of this character. The Iowa Association will endeavor to have a law of this kind enacted, and several other State bodies are considering legislation of much the same character.

Then, too, a number of the State associations have exhibited a good deal of impatience because physicians have not been brought under the scope of the food and drug laws. This point has been discussed at several meetings, and in two or three instances it has been voted to attempt legislation which would give the board of pharmacy or other enforcing authority the same supervision over drugs dispensed by physicians which it has over those dispensed in drug stores. Thus it will be seen that the druggists are endeavoring to restrict the competition of grocers on the one hand and physicians on the other.

* * *

FREE ANTITOXIN NUISANCE.

Another note which has been struck at a number of the State meetings is that of opposition to the action of some of the States in distributing free antidiphtheric serum. This is what Charles B. Sears, president of the New York State Pharmaceutical Association, had to say on the subject in his annual address:

> There is a growing tendency among a certain class of medical practitioners to avail themselves of the use of State free antitoxin for their own pecuniary benefit. The object of free antitoxin, to give the needy the benefit of curative treatment which would be beyond their means, is commendable, but the abuse of this privilege is very reprehensible and a burden upon the State, an injustice to the balance of the medical pro-

fession, the drug trade, and to the laboratories which maintain expensive equipment and a corps of studious workers perfecting the various antitoxin serums and bacterial vaccines. It is recommended that this association take such action as to bring about a correction of this abuse, limiting the use of free treatment in those cases dependent upon charity to cases treated by physicians employed by the department of charity or health.

There is no doubt at all that this abuse has grown greatly within the last few years, not only among some of the State governments, but in many of the cities as well. Waiving cases of absolute poverty, there is no more reason for a State or a municipality to manufacture and give away serums than for it to manufacture and distribute shoes or automobiles. It is a distinct interference with private industry. President Jacob Schrodt, of the Texas Pharmaceutical Association, deplored the establishment of an antitoxin factory in his State, and declared it a useless expense to taxpayers, an injustice to retail distributers of medicines, and an unwarranted interference with the rights of manufacturers.

* * *

PREREQUISITE DIFFERENCES.

Legislative matters, indeed, seem to have attracted the major share of attention at most of the State meetings this year, and in at least two or three States we find the druggists at loggerheads with one another. In New Jersey a year ago it was voted by a small majority to seek the enactment of a graduation prerequisite law. Subsequently, however, when the bill was introduced in the legislature, it was vigorously opposed by the minority faction in the State Association. The legislature, finding the druggists divided among themselves, therefore took the easiest course and let the bill die.

This situation formed the main theme of the report of George M. Beringer, chairman of the Legislative Committee of the Association, at the recent annual meeting. He charged, moreover, that some of those who had supported the bill in the discussion at the 1911 meeting, had stabbed it in the back afterwards. His report called forth a vigorous debate, and Mr. Beringer himself conceded that under the circumstances it would probably be necessary to carry on a campaign of education among the druggists of the State before attempting to introduce another prerequisite bill in the legislature.

Out in Minnesota, where the graduation prerequisite idea has been discussed for several years, we find that at the recent annual meeting of the State association a vote was taken, resulting in a small majority in favor of the measure. This majority was so slight, however, as to breed the suspicion that the history of the New Jersey bill may be repeated. The minority in opposition very strenuously presented its objections, and it is too much to expect that it will keep quiet when the bill is up for discussion in the legislature.

All of which constrains us to say, what we have said on many occasions before, that progressive legislation of this character can be secured only when it has a large body of sentiment behind it. The question has been fought over every year at the Illinois meetings for five or six years, perhaps longer, but only now has a sufficiently large number of druggists in the State come to look upon the step as necessary. We reported last month that a popular vote had been taken throughout the State and that at last the drug trade was found to be almost a unit in support of the proposition.

* * *

THE SCRAP IN PENNSYLVANIA.

And while speaking of the differences between druggists over legislative matters, we are reminded that another storm seems to be sweeping over the grand old Republican State of Pennsylvania. The drug trade there has been largely torn up for three or four years over an attempt to secure amendments to the State pharmacy and anti-narcotic laws. At the State meeting last year the retort courteous was bandied back and forth with a good deal of freedom, and it was finally decided to make another attempt to get together this year. New drafts of a pharmacy bill and an anti-narcotic measure were printed and distributed a month or two prior to the meeting, and at the meeting itself they were subsequently amended somewhat and approved by a small majority.

This majority was so slight, however, and the opposition was so determined, that mutterings of discontent have been heard ever since. The Philadelphia contingent, for instance, believe that nothing should be attempted in the way of anti-narcotic legislation until the Federal government has passed one of the bills now under consideration in Congress. The

country druggists, on the other hand, are very indignant over that feature of the pharmacy draft which provides that general stores over three miles from a pharmacy shall be licensed to sell certain drugs and medicines in original packages. Although beaten at the State meeting, these factions still insist that they will not lie down, and a typical expression was that of Walter Rothwell of Hatboro, who declared at a recent meeting of the P. A. R. D. that "We countrymen are opposed to both these laws, and we propose to get a steering committee to work on the various legislators of the State with a view to having the measures killed."

It would seem apparent that nothing can be done until the drug trade of Pennsylvania gets closer together on this proposition. That all legislation is the result of compromise has been pointed out over and over again, and the druggists of Pennsylvania must apparently minimize their differences before anything can be done in the way of securing adequate legislation.

* * *

FEATURES OF PENNSYLVANIA DRAFT.

Waiving the Pennsylvania anti-narcotic bill, the principal feature of which provides for a record of all sales, the pharmacy bill finally approved by a small majority of the State Association contains the following as its main provisions: It declares for the licensing of the drug stores of the State at an annual fee of one dollar; the licensing of registered pharmacists and qualified assistants; the permission of the licensed general store, over three miles from a pharmacy, to sell drugs for medicinal uses in original packages put up under the supervision of a registered pharmacist; the exchange of State board certificates with the boards of other States having equal requirements for registration; the elimination from the list of poisons, the sales of which have to be registered and the article labeled, of colors ground in oil, white lead, and lead products for technical purposes, and making a misdemeanor of the failure to recognize the request in writing by a physician that his prescription be not renewed. As prescriptions, according to the proposed law, must be kept on file by the pharmacist for at least five years, this law virtually settles in Pennsylvania the question of the ownership of the prescription.

N. A. R. D. LEGISLATIVE CONFERENCE.

In the foregoing paragraphs we have touched very lightly on some of the legislative questions now agitating the druggists of the country, as represented in their State pharmaceutical associations. On a number of these questions there are as yet great differences of opinion. Sentiment must be crystallized before successful and desirable legislation can be achieved.

Under the circumstances, therefore, we consider it very fortunate that the N. A. R. D. is making preparations to have another legislative conference at the forthcoming meeting of the organization in Milwaukee. A conference was called at Niagara Falls last year, but owing to the sudden illness of Judge Errant, just before the convention, very little could be done. In the meantime Mr. Freericks has been acting as the general attorney of the association, has been devoting himself to a careful study of legislative problems, and is well qualified to direct the discussion at Milwaukee.

Secretary Potts has sent out a general call on behalf of the proposed legislative conference, and it is earnestly to be hoped that this will become one of the most productive features of the Milwaukee gathering. The American Pharmaceutical Association, at the Boston convention last year, passed a resolution calling for a joint legislative conference to be attended by delegates from all of the national bodies—the A. Ph. A., the N. A. R. D., the N. W. D. A., and the like. It was unfortunate that nothing was apparently ever done to bring such a conference about. The idea died a-bornin'.

* * *

AS TO COMMERCIAL TRAINING.

Charles B. Sears, in his presidential address at the meeting this year of the New York State Pharmaceutical Association, had the following to say about the necessity of a greater degree of commercial education in pharmacy:

> It is our duty to educate our young men in the profession of pharmacy, but we cannot but be mindful of the changing conditions affecting the calling. It is urged that there is a marked decrease in prescription writing. Be this as it may, we must recognize the conditions that tend to decrease the drug trade proper. Dispensing physicians, electrical treatments, osteopathy, serum and bacterin therapy and so-called Christian science all tend to

curtail the use of drugs. It has therefore been necessary for the drug trade to add side-lines. With the addition of these side-lines the profession of pharmacy is becoming more and more commercialized, and we note the lack of training in our employees in commercial lines, and from discussion in the drug journals this lack is not confined to the employees alone.

We must not lose sight of the ethical side of our business, but at the same time we should provide education for our young men that would prepare them to estimate profits, overhead expenses, etc., that they may be competent to meet the severe competition that the "chain store," department store, and mail-order house is bringing us. It is therefore recommended that this association request the pharmaceutical colleges of the State to provide a limited commercial course in connection with their regular instructions.

The committee to which President Sears' address was referred, acting upon the several recommendations contained in it, expressed its opinion that "no request should be made upon the colleges to give consideration to the commercial training of students as in the present courses adequate commercial instruction is provided." Now we disagree most decidedly with the committee, and we desire to put ourselves on record as being in sympathy with the position of Mr. Sears. We are saying nothing about the schools of pharmacy in New York State, and nothing individually about any other schools. But we have long cherished the conviction that pharmaceutical education as a whole in this country has not yet paid the attention which it ought to pay, and which in time it surely will pay, to the subject of commercial training. This is a commercial age; business to-day is conducted on a scientific basis; the retail drug trade is at least 50 if not 75 per cent commercial in character; and we are absolutely certain in our own minds that pharmaceutical education ought to be more or less revamped until a far larger share of attention is devoted to business training than the subject now receives. But this reform, like all other reforms, must be preceded by a period of agitation and enlightenment. Let the good work go on!

* * *

THE LIQUOR QUESTION.

The liquor crisis in pharmacy is not anything like as acute as it was a few years ago, when the temperance wave began to sweep over the country. For one thing, the wave itself has somewhat receded. For another, local sentiment has in many sections caused the passage of laws restricting the sale of liquors in drug stores. For a third, the druggists themselves have in some cases seen the light. Out in Iowa, for instance, where the crisis was acute two or three years ago, we found on a recent visit to the State that things were in very good condition. Many druggists have voluntarily thrown out liquors entirely from their stores, while in many counties the sale of liquor has been denied entirely in drug stores as in saloons.

In West Virginia, however, the question is apparently still an acute one, and we are informed that at the recent annual meeting of the State Pharmaceutical Association a resolution was unanimously adopted calling upon the next legislature to prohibit the sale of liquor in drug stores under any circumstances whatsoever. The members of the association have, it would seem, gotten to the point where they believe there is only one way to solve the liquor problem in pharmacy, and that is to drive it out root and branch.

* * *

A NEW DEAN.

A good deal of gratification has been expressed over the selection of Julius W. Sturmer to succeed I. V. S. Stanislaus as dean of the Medico-Chi College of Pharmacy in Philadelphia. It will be recalled that Dean Stanislaus recently resigned to take up some branch of private manufacturing. Professor Sturmer has for several years been a member of the faculty of the Department of Pharmacy of Purdue University in Indiana, from which school he was himself graduated in 1891. He is well known to the membership of the American Pharmaceutical Association, and during the last few years has read a number of papers before the Section of Education and Legislation of that body which have shown him to be possessed of a capacity for original thought and of definite and well-wrought ideas in the science of teaching. He is likewise the author of two or three books, the chief one being on the subject of pharmaceutical and chemical arithmetic.

* * *

ANOTHER EDUCATIONAL FUND.

We had something to say last month about the commendable effort of the Tennessee Pharmaceutical Association to establish an educational fund for the assistance of worthy young men who need financial help in getting a pharmaceutical training. We are

glad now to observe that similar action is being taken by the Alabama Association. What is known there as the Candidus memorial fund is being developed as a tribute to the life and services of Dr. Philip C. Candidus, who died two or three years ago. The association has appointed a committee of six to raise and handle the fund, and, as in Tennessee, the money will probably be loaned to students instead of given them. At the Alabama meeting this year two cash prizes of $25.00 each were awarded to authors of the best papers read at the meeting, and it was quite gratifying that both men immediately turned the money into the Candidus memorial fund. With the Michigan Association in the lead as the originator several years ago of the Prescott memorial fund, we now have three State organizations carrying on admirable work of this character.

* * *

The Mellin's Food Co. of Boston has recently been unfortunate enough to suffer through death the loss of its president, Thomas Doliber, who was the founder of the company, and whose business career covered a remarkable period of nearly 60 years.

EDITORIAL

PREVENTION RATHER THAN CURE.

Nothing is doing more to minimize disease in this country than the spreading knowledge of prophylaxis. Prevention rather than cure is the key-note of modern medicine. And, strange to say, the movement to eliminate the various sources of infection is being fostered by no class more than by the doctors themselves. People may talk about the commercialization of the medical profession, but one fact that stands out boldly against the charge is the manifest desire on the part of physicians to prevent disease wherever they can.

To their credit it may be said that their efforts to spread a knowledge of prophylaxis among the masses have already accomplished a world of good. And it is a fine tribute to the charity of our medical men, that they give unstintedly of their time to purposes which mean the minimizing of their own practice and the diminution of their own incomes. Of course, every man worth his salt has a certain amount of altruism in his make-up, and is willing to make personal sacrifices for the good of others. But in these days of more or less conflict between doctor and druggist, it is well to open our eyes wide to the virtues of our medical friends.

Imagine a lawyer doing anything to stop litigation! Any druggist who has ever had occasion to consult one would be incapable of such a supposition. Yet medical men are prominent in anti-tuberculosis campaigns. They are found lecturing to laymen on the serious consequences of venereal diseases. They give thought to our milk and water supplies, and otherwise look out for the sanitation and hygiene of society.

By way of further preventing diseases, physicians are perfecting a system of vaccination which bids fair to make a big hole in their annual incomes. Typhoid vaccine, for instance, which has already been mentioned at some length in these columns, promises to reduce the disease to a mere fraction of its former frequency. There have been a half million cases of typhoid fever annually, the mortality running from 12 to 15 per cent. Some 30,000 people, we have it on good authority, die every year from the disease. The army men in their summer maneuvers have been especially subject to infection from drinking contaminated water. Communities in the country districts as well as in the cities have contributed year by year their share of victims to typhoid.

But thanks to the efforts of the medical profession, a vaccine has been perfected which will reduce the frequency of this trying disease very materially. The prophylactic value of anti-typhoid vaccination has been demonstrated beyond doubt. In time it will be used in every community afflicted with typhoid, which will mean the elimination of much illness. Not only to cure sickness but to prevent it appears to be the aim of medical workers of the present day.

THE MISCONCEPTION ABOUT DRUG GUARANTIES.

Despite the amount of discussion and elucidation which has centered in and about the food and drugs act ever since its passage six years ago, there is still a good deal of misunderstanding about the question of guaranties.

The usual statement on packages, "guaranteed under the food and drugs act," etc., is ordinarily interpreted by the public to mean that the product has been guaranteed by the government and given the official stamp of approval.

Some druggists, moreover, are victims of this same fallacy. Others, while knowing that this is false, and that it is the manufacturer instead of the government who guarantees the goods, still believe that the manufacturer has not provided a guaranty unless a statement to this effect is printed upon the label. Still others insist that the guaranty statement *must* be printed, that the law demands it, and that products are illegal which do not bear it.

Now these are all misconceptions. The package need contain no statement to the effect that the product has been guaranteed by anybody. The law makes no such statement necessary. It is simply printed for the protection of the dealer himself, who might otherwise be prosecuted by the government, State or National, if the goods were found adulterated. The law generously declares that a retailer, selling a product made by another, will be absolved from prosecution if he can show a guaranty from the man from whom the goods were purchased. The government then shifts the blame from the retailer to the man who furnished him.

Now the manufacturer or the jobber may protect the retailer with a guaranty in one of two ways. He may attach it to every bill of goods, thus covering everything represented on that particular invoice. Or, for purposes of convenience, he may register a blank guaranty in Washington covering all of his output. In the latter event he is given a number by the government, and this number he may then print on his packages together with the customary statement that the products are "guaranteed by —— under the food and drugs act."

But the latter method is merely an alternative. The manufacturer may, if he chooses, use the other form of guaranty, and say nothing at all about the matter on the goods themselves. Thus it does not follow that a retailer is unprotected in selling a given article merely because the label on that article says nothing about a guaranty.

Furthermore, every retailer should understand by this time that he can look for protection only to the house from which he purchases the goods. If the goods go through three or four or a dozen hands before they reach him, no guaranty protects him except that of the man or the firm from whom he secures them. In other words, so far as most transactions are concerned, it is the jobber's and not the manufacturer's guaranty to which he must look in case of trouble.

ANOTHER MODERN INSTANCE.

We have no desire to become moral teachers to the community. There is one great weakness, however, which we have mentioned several times in the BULLETIN during the last two or three years, and which apparently needs mentioning again. We refer to what seems to us the foolish, utterly inexcusable, and almost criminal failure of so many druggists and other business men to protect themselves against fire losses by adequate insurance. Here, for instance, are portions of a personal letter which we have received during the last month from one of our subscribers:

> I have always *tried* to live the life of a man, and I shall keep on trying, but it was an awful blow when I let about eighteen or twenty thousand dollars go up in smoke without one penny of insurance. Others before me and some since have done the same, and have done it as honestly as I did, but that consideration is of no avail now. I am left as one of the used to be's—a thing of the past. I have been accustomed to active merchandising all my life, and I always loved to mingle with people up to the closing of my store on the night of September 28 last, but it was an awful experience to get up as a lone wanderer the next morning with nothing left but my store key in my pocket. I have always said that whatever happened I would hold myself together and keep my mind collected and solid, but it has been mighty hard to keep that promise. It sometimes proves to be all I can do to keep from letting my mind take its flight.

This is pitiful, isn't it? A man evidently well along in years, with insufficient youth and energy to start in afresh, is practically left penniless at a time when he ought to begin taking things easy. But, unfortunate as this particular instance is, how foolish are business men generally who ignore warnings of this kind, and who fail to protect themselves at a relatively slight expense against losses which may come to them at any time! A druggist who fails to take out fire insurance is only one step removed from the man who refuses to get off the tracks when a railroad train is approaching.

THE HALL OF FAME

A BRILLIANT PRIZE WINNER.

A remarkable record seems to have been made by one of the seniors at the Philadelphia College of Pharmacy this last year. We refer to Elmer H. Hessler of Cape May, N. J. From the commencement programme it appears that 17 prizes of various kinds were awarded to members of the graduating class. Of these 17, eight were won by Mr. Hessler, and in five other cases he received honorable mention. Thus he figured conspicuously in 13 out of 17 contests! Under the circumstances it was not at all surprising that he was accorded the rank of "Distinguished," conferred only upon two graduates a year.

ELMER H. HESSLER.

The eight prizes bagged by Mr. Hessler were as follows: The Alumni gold medal; the Procter Prize—a gold medal for the highest general average with a meritorious thesis; the William B. Webb Memorial Prize—a gold medal and certificate for the highest general average in operative pharmacy and specimens; the Chemistry Prize of $25.00; the Analytical Chemistry Prize of $25.00; the Instructor's Prize of $20.00 for the highest term average in pharmacy, chemistry, and materia medica; the Kappa Psi Fraternity Prize—a gold medal for the highest general average during the senior year; and the Public Lecture Report Prize of $10.00, for the best written report of a series of ten public lectures held under the auspices of the college.

This exhibits quite a range in scholarship, but we trust we may be pardoned if we remind the young gentleman that the world watches a brilliant prize-winner far more keenly than it does the average man, and expects much greater things of him. Mr. Hessler must make good with a vengeance—or his friends will be disappointed in him!

DR. J. D. HUMPHREY.

Dr. Humphrey is well known to those druggists who attend the annual meetings of the N. A. R. D. He is almost always a delegate from his home State of Alabama, and he has frequently served the organization in important official capacities. In Alabama he is of course one of the leading spirits, and the State association would not be the same without him. A graduate in medicine also, he stands well among the physicians, and frequently talks before medical meetings in the interests of the druggists of the State.

DR. J. D. HUMPHREY.

DR. BEAL'S SON MARRIED.

Cards were sent out last month announcing the marriage of George Denton Beal to Miss Edith Downs of Scio, Ohio. Mr. Beal is the son of Dr. James H. Beal, general secretary of the A. Ph. A. and editor of its official

organ. The young man has a brilliant heritage to draw upon, and he will undoubtedly carve out a successful future. He is instructor in chemistry at the University of Illinois.

A NEW MEMBER OF THE WISCONSIN BOARD OF PHARMACY.

The recent death of H. B. Allen, of Richland Center, a well-known member of the Wisconsin Board of Pharmacy, left a vacancy to be filled. To this position the governor has appointed B. J. Kremer of Fond du Lac. The appointment has proved a popular one. On several occasions the State association has indorsed Mr. Kremer for appointment, and the governor was evidently moved by the association's attitude. Mr. Kremer is an alumnus of the Northwestern School of Pharmacy in Chicago. He is the principal owner and the manager of the Kremer Drug Co. in Fond du Lac.

B. J. KREMER.

The Board of Pharmacy in Missouri, which has for some years been considering the advisability of establishing "practical" examinations, has now adopted them as a regular feature of its work. The board also requires one year of high-school work or its equivalent as a preliminary requirement from all candidates.

PROFITS AND EARNINGS

THIS STORE RUNNING BEHIND.

Here is the statement of a druggist who apparently is in hard straits. He writes:

"This business is somewhat out of the ordinary. On February 1, 1911, I was hired to take charge of a store in this small town. It was in awful shape. The stock was run down and everything frightfully dirty. I found some 'dead stock' in the shape of a couple of kittens under one counter. The party who bought the store realized what we were up against, and said if we broke even on the first year's business we would be lucky.

"There was no cash to start with, and I used my own funds to make change the first day. Our new soda fountain wasn't installed until June. Meanwhile we missed a lot of trade. Then the landlord built on to the store room for us, and his taking out the rear end of the store, which was brick, made a very dirty mess for a time. This shows some of the difficulties I have worked under.

"The stock and fixtures—everything, in fact — invoiced on February 11, 1911, $2490.03. On February 18 the owner bought a stock from a dispensing physician amounting to $155.35, June 1 a new soda fountain for $495, and November 1 a new furnace costing $98, making a total of $3238.38 put into the business."

Discounts	$ 28 51
Expenses (including $900 salary)	1254 83
Cash receipts	5063 00
Disbursements	4983 39
Balance on hand	79 91
Merchandise (including all purchases and original invoice)	7836 85
Profit and loss (worthless accounts)	15 65
Book accounts	289 13
Amount due the jobbers	539 55
Invoice at end of first year:	
Fixtures	$ 514 00
Soda fountain and supplies	584 56
Merchandise	1968 36
	$3066 92

Apparently the owner is in business for his health. The manager draws $900 a year at a loss of $341.97 to the proprietor. Where does the proprietor get any returns on his investment? He better sell out, unless there is a promise of improvement in the business. Even

then he probably would have to take a loss. It is a question whether the store would bring him over 60 per cent of what it cost, should he care to sell it.

Let us see where he stands. He admits that $3238.38 was invested in the business. His assets are:

Cash	$ 79 91
Accounts receivable	289 13
Merchandise inventory	1968 36
Fixtures	514 00
Soda fountain	584 56
Total	$3435 96

Subtracting accounts payable, $539.55, from the assets of $3435.96, we find he is worth $2896.41. This is a pretty sad showing, for the original investment, as we have already pointed out, was $3238.38. Admitting the difficulties that beset our correspondent, the fact remains that his business is running behind. He ended the first year with a loss.

Let us make an analysis of his profit and loss from February 1, 1911, to February 1, 1912. He began with an inventory of $3238.38 and ended with an inventory of $3066.92, a shrinkage of $171.46. He bought $4598.47 worth of goods which, less the cash discount $28.51, cost him $4569.96. Adding to this the shrinkage of $171.46 in the inventory we find the goods cost the owner $4569.96 plus $171.46, or $4741.42. To this add expenses of $1254.83 and bad debts of $15.65, and you have the total cost of the merchandise, $6001.90. The sales were $5669.93. The difference between the sales and cost of the merchandise shows a loss of $341.97.

A statement of his assets and liabilities shows the same net loss:

Cash	$ 79 91	
Fixtures	514 00	
Accounts receivable	289 13	
Soda fountain	584 56	
Merchandise inventory	1968 36	
		$3435 96
Accounts payable		539 55
Net worth		$2896 41
Commenced business February 1, 1911, with:		
Stock and fixtures	$2490 03	
Bought physician's stock	155 35	
Bought soda fountain	495 00	
Bought furnace	98 00	3238 38
Net loss		$ 341 97

HIS EARNINGS GO INTO STOCK.

Here is a statement for analysis. The store is about three years old. The proprietor has been in business for himself just one year. He has the only drug store in a mining town of 1500 people.

Stock and fixtures, 1911	$1515 00
Stock and fixtures, 1912	2947 79
Sales	6232 50
Purchases	4803 36
Amount paid on note	541 67
Expenses:	
Freight and drayage	$ 100 00
Clerk	250 00
Proprietor's salary	1000 00
Rent	300 00
Light	40 00
Fuel	30 00
Taxes and insurance	50 00
Total	$1770 00

This store must be expanding. The stock and fixtures almost doubled in the year 1911. They increased according to the statement from $1515.00 to $2947.79. All the profit apparently went into new stock. Our friend is evidently putting all his gains right back into business, which is the natural thing to do the first year.

Let us see where the money is going. Purchases for the year were $4803.36. We find from the increase in the inventory, however, that goods to the amount of $1432.79 went into the permanent stock, so that the net cost of the goods actually sold during the year was $3370.57. Subtracting this figure from the sales of $6232.50, we find gross profits of $2861.93. Dividing the gross profits of $2861.93 by the sales of $6232.50, the percentage of gross profit is found to be 45.91, which is considerably higher than the average —so high, in fact, as to lead us to believe that we have possibly been led astray by the statement of our correspondent.

By subtracting the expenses $1770.00 from the gross profit $2861.93, we obtain the net profit, $1091.93. Dividing $1091.93 by the sales, $6232.50, the percentage of net profit is found to be 17.5. This is high. The proprietor should enjoy a nice income from the business in the future when it will not be necessary to put so much of the earnings into stock.

The expenses are about the average for a small business. Dividing $1770.00 by the sales of $6232.50, the expense is found to be 28.39 per cent.

J. H. Carmichael of Ashton, Iowa, in addition to having the large salesroom shown in this picture, has another room 15 by 66 feet in dimensions which is devoted to paint and wall paper.

Dr. H. C. Hawley, proprietor of the Hawley Drug Co., Clarinda, Iowa, has one of the neatest and best equipped stores in the State. Everything is right up to the minute.

J. W. Jones, proprietor of the Chatham Pharmacy, Chatham, Va., is the gentleman standing with hat off in front of the cigar case. The soda fountain is a popular feature of Mr. Jones's store.

This picture illustrates the pharmacy of the Simmons-Horn Drug Co., Demopolis, Ala. Judging from the number of customers and clerks in evidence, these people do a gratifying volume of business.

Here we have an outside view of a pharmacy in Panama. It is known as the Central Drug Store, and the proprietor is Manuel Espinosa.

Perrone & Glando comprise a new retail drug firm in Oakland, California. Mr. Glando was formerly one of the department managers for the Owl Drug Co.

Drug Stores Here and There.

J. P. Lipp, Blissfield, Mich., is an energetic druggist who handles a large stock of everything in the drug and allied lines. "Get it at Lipp's!" is a slogan that he has made familiar.

This is a view of Mr. Lipp's prescription counter with the proprietor himself standing in the background. Mr. Lipp is one of the vice-presidents of the Michigan State Pharmaceutical Association.

The Mebs Drug Co., Columbus, Ohio, have one of the handsomest drug stores in the State. It is thoroughly departmentized and even has a rest room for ladies as well as a manicuring parlor.

This shows the soda grill room in the Mebs store, where among other things a noonday lunch is served. The handsome fountain was installed by the Walrus Manufacturing Co. of Decatur, Ill.

The Newman Drug Co., Louisville, Ky., of which Addison Dimmitt is the president, has a store the beauty of which is scarcely suggested in this engraving.

This shows the prescription department of the Newman Drug Co. It is finished in white enamel and the slabs and shelves are of white opal glass.

Drug Stores Here and There.

This is the residence of Azor Thurston, Grand Rapids, Ohio, who is president this year of the Ohio State Pharmaceutical Association.

Here we have the home of F. F. Vedder of LaHarpe, Ill. Mr. and Mrs. Vedder evidently believe in plenty of porch room, both upstairs and down!

Edward Williams, of Madison, Wisconsin, the well-known N. A. R. D. and board-of-pharmacy man, has a home on Lake Monona—a lake 13 miles long and three miles wide.

This shows a view of the lake from Mr. Williams's lawn. Imagine living under conditions like these the whole year around! And yet they say druggists do not enjoy themselves!

How Druggists Live at Home.

CONVICTS I HAVE KNOWN.

By HARRY B. MASON.

When quite young I was for nearly three years an inmate of a large and well-known prison in the East. I trust this frank and simple confession will not cause my readers to turn pale and glance behind them. I was not a prisoner, but if I had been—well, prisoners are neither such unusual nor such terrible creatures as the popular fancy paints them. It is quite as easy to find knaves and dangerous folk out of prison as in it. A sarcastic cynic once said that if everybody were landed behind the bars who deserved it there wouldn't be people enough left to serve as officers in the Salvation Army.

But I desire neither to accept nor to preach the gospel of universal evil-doing. What I really started out to say was this, that convicts are not such an unusual lot as they are popularly supposed to be, and that indeed they are surprisingly like the rest of us. Many of them are of course incorrigible criminals, but even these are shrewd enough to behave themselves in prison and to measure up to satisfactory standards of good prison citizenship. Many others are accidental criminals—a drunken frenzy, bad associations, sudden temptations, or hard luck has caused them to step aside but once from the straight and narrow path before realizing it, and then be thrust behind prison bars to eat out their hearts in despair and chagrin. Still others have committed the genteel crimes which thousands of men are committing every day—only they have been caught at it. On the whole the average of intelligence and of behavior is not so far below that to which we are accustomed outside the walls; and indeed one meets many convicts whose personalities are intensely interesting.

THE LUXURY OF PRISON LIFE.

My experience in the prison immediately followed my graduation from a school of pharmacy. I was the pharmacist of the institution, and besides attending to the duties of this position I did certain chemical and bacteriological work, and on occasion acted also as physician in the treatment of minor ills. During my entire incumbency I had quarters inside the walls, in the hospital building, and lived and ate and slept surrounded by convicts, whom, indeed, I regarded as I would the employees and patients of any private hospital were I to-day to be situated in such an institution. Convicts tended my person and my apartments. Convicts cooked my meals and served them. A convict assistant helped me in my pharmaceutical work and had the free run of the dispensary.

Indeed, I would not barter my three years

At the "morning call" the physician stood outside the dispensary window, examined the patients, and gave verbal prescriptions, while the pharmacist and his convict assistant ("Henry") did the dispensing inside and handed the bottles out of the window to the waiting victims.

or less of prison experience for any consideration. For one thing, it gave me a sense of luxury and autocracy which I never dare hope to feel again. I was absolute lord of my own little corner of the world. I had but to press a button in order to secure an attention and an assistance which only a ruler can command. There was one man to polish my shoes and brush my clothes, another to take my garments down to the tailor shop and press them, still another to receive my dictation and write my letters out on the typewriter, and yet others to save me the slightest exertion. It is a standing mystery to me how I ever had the courage to resign my position and again become a plain man acting as my own servant. I know how a millionaire feels when he loses his

wealth. Sometimes now, when of a Sunday morning I get warm and angry in polishing my troublesome shoes, I sigh for luxury and power that have gone forever, and I realize that even a prison has its attractions.

HENRY OF THE LIGHT FINGERS.

And then the people you meet in prison are so interesting! There was one man about my quarters who had an unquestioned right to be classed as an "incorrigible criminal." He was serving his third or fourth term for burglary, and yet he was as mild-mannered and gentle-eyed as a deer. His face would have gotten him a job as a church janitor or night-watchman almost anywhere. Perfectly devoted to me, and loyal in a degree which I have rarely

A corner of the pharmacist's office at the prison, adjoining the dispensary.

seen exhibited in private life, he was always looking for some opportunity to be of service and was genuinely pleased over anything which brought me good luck or satisfaction. I can see his smiling face now as he listens to some bit of personal news I am telling him, and I can follow him as he goes about fixing my room up and as he serves my luncheon and hands over some delicacy he has managed to secure by means of those prison politics in which he was an adept.

But there is no denying that Henry was light-fingered outside the walls. I do not think he would have done bodily injury even under danger to himself, or that he would have shot a revolver though likely to be captured. But he *did* like to burglarize a house and secure a big haul! The stories he used to tell me about his exploits would have put to shame the ingenious imaginings of the artists who turn out our dime novels. He would give all the details of conception and execution in the most matter-of-fact way, and grin mildly as though he were relating how he had played a school-boy's trick on a chum back in his younger days. There was no boasting, no criminal fierceness, no social theory that the world owed him a living—only an apparent incapacity to realize the sin of taking things which didn't belong to him. It was all a kind of joke with him. Certainly he was a strange study.

Mrs. Ballington Booth has a marvelous influence over her "boys" in prison, and she has reformed hundreds of criminals and made respectable citizens of them, completing her work by educating society to give the convict a chance and not drive him back into criminality by branding him with infamy and refusing him work and an opportunity to redeem himself. Henry became one of Mrs. Booth's boys, and I have no doubt that he was perfectly sincere in his adoption of religion and in his resolve to earn an honest living by his trade as a cabinetmaker. But I must confess that Henry never found it convenient to return ten dollars which I loaned him as he was leaving prison. I got two or three letters from him during the first few weeks of his freedom, and he always mentioned the loan with gratitude and spoke appreciatively of the suit of clothes and other things which I had given him.

Whether he reasoned after a time that he had earned the money in my service and really deserved it; whether he failed to get steady work and could not easily repay the loan; or whether he simply could not recover from his fundamental incapacity to discriminate between honestly and dishonestly obtained things, I do not know. I have often wondered what became of Henry, and I have hoped I would some time run across him unexpectedly in my travels. Perhaps I shall yet.

A PRISONER TURNED GENTLEMAN.

This hope suggests another interesting experience. There was one man in the prison who was a very clever cabinetmaker, and who made me a desk after my own idea which was a source of great satisfaction to me—a desk, by the way, which I still have. Some

years later, when I had moved to another city and State, and was temporarily living in a boarding-house, a well-dressed man called one evening and sent up his card. The name was an unfamiliar one to me, and the man's business was that of traveling agent for a well-known firm of furniture manufacturers. I needed no furniture at that time, and I was at a loss to know what the fellow could want of me. As I went into the reception room a man of prosperous appearance and considerable dignity arose to greet me, and he had to explain who he was before I was able to recognize him. It was my old friend Stimson, the cabinetmaker. The difference between stripes and well-cut business clothes, and the contrast between the inevitable submissive attitude of prison and the independent air of liberty, were so marked that I could scarcely credit my eyes. Stimson had been with the furniture house for some time and was succeeding to the entire satisfaction of himself and his employers.

Some days after he called on me, when I thought there was no chance of any one meeting him in the city who had happened to see him in the house, I keenly enjoyed telling the table of boarders at dinner one evening where I had known Stimson before, and it was amusing to see how horrified some of the softer sex were! For a considerable time afterwards they locked their windows every night with great care, glanced under the bed with more than the usual degree of shivering apprehension, bolted their doors in the most secure manner, and for all I know pulled their beds against the door and sat up in bed all night, trembling at every sound.

Stimson is the only one of my convict acquaintances whom I have ever met in polite society, but this is because I am now somewhat distant from the prison. I have friends who repeatedly see ex-convicts in private life and who are on more or less intimate terms with them.

BUFFALO BILL'S SOCIAL MENTOR.

There was one man in the hospital in whom I was very much interested. He had enjoyed a most fascinating career and was a man of unusual education and culture. Let me call him Pattison—chiefly because this was not his name. Pattison was by profession an architect, but he was also a clever amateur painter, as I can attest by a couple of beautiful water-colors which I have in my library to-day. He was a linguist, knew stenography and typewriting, and it was because of these qualifications that the prison physician made him his secretary. The doctor was a man of reputation in his profession, wrote frequent papers for society meetings and journals, and Pattison became invaluable to him.

Pattison was then perhaps 45 years old. He had experienced a successful career in his profession, and for a number of years had enjoyed the unique experience of traveling about the world with Buffalo Bill and acting in the triple capacity of architect, secretary, and friend at a salary of $6000 a year and expenses. He had drawn the plans, I believe, for the building which Buffalo Bill erected for his Wild West show in Chicago during the World's Fair, and he had also designed the buildings put up in several European capitals during Mr. Cody's trips abroad. He had acted meanwhile as Mr. Cody's secretary and had "coached" him for the difficult social duties which he was often called upon to discharge. When Mr. Cody was dined by the European monarchs, Pattison would sit at his elbow when circumstances permitted and make the whispered suggestions which a man of the plains, with little opportunities for culture, and at that time with little worldly experience, would naturally need in order to acquit himself creditably.

After leaving Buffalo Bill, Pattison had blossomed out into a promoter. I have forgotten what hopeful scheme he was elaborating, but I am quite sure it was as honest as are the plans of the average promoter. He was arrested and imprisoned on a technicality. My memory of the occurrence is somewhat hazy, but my impression is that he collected and used some watchful and anxious widow's money before his plan had proceeded far enough to give him the legal right to do so. She was afraid her money would disappear beyond recall, and she at once brought suit for its recovery and incidentally for Pattison's punishment. For some reason the judge or the jury, as the case may have been, didn't like the look of things, and Pattison was "sent up" for six years. He always declared his innocence, and I was once told by a man

outside, who knew the circumstances, that he thought Pattison had meant to "play square" in the deal.

Certainly he was a most exemplary man in prison, and he never lost his native dignity, his social polish, his attitude of a gentleman. I have rarely listened to a more fascinating raconteur than Pattison. He had traveled extensively, observed keenly, and read widely.

A partial view of the prison itself, showing the outside wall surrounding it.

He had mixed in the best of "society." His voice was low and melodious, and his manner the fruit of the best breeding. He had married the niece of the governor of a southern State, and much of his charm was doubtless due to his experience in southern social circles.

In speaking of his marriage I am reminded of an incident which gave me much secret

Another view of the wall, and some convicts filing through the prison gate after having been outside doing road-construction work.

amusement at the time. Pattison came rushing into my office one day in great indignation, his proud head thrown back farther than usual, and thrust before me a copy of *Munsey's Magazine* containing the picture of a handsome woman who, it was stated underneath the engraving, had become an actress. It was Mrs. Pattison. "Think of it!" declared Pattison with heat. "Think of it!—my wife disgracing herself and her family by going on the stage!" And the scorn and contempt in his voice and manner I can feel to-day as I think of the circumstance.

Well, Pattison left the prison shortly after I did, and I have heard often of him since. He has had the honorable and successful career which he deserved. He is a contractor in one of the large cities, and his income is one which I should not refuse if it were offered me. Recently he has married again.

A MELANCHOLY DANE.

Then there was Bergen, a slight young Dane with all the melancholy and all the interest of a Hamlet. Bergen always declared to the few who had his confidence, and with whom he

The prison band giving its daily concert on the lawn in front of the warden's office inside the enclosure.

deigned to chat on free and easy terms, that he was a member of one of the Danish noble families, and certainly his accomplishments and his bearing indicated it. He had come over to the World's Fair in Chicago as a representative of his government, and was at the Fair Grounds all summer. By the time the fair was over with he had become so enamored of conditions in America that he resolved to stay here. He was an ambitious fellow, was always an eager searcher after knowledge and experience of diverse kinds, and so he had attached himself to some prominent engineering firm. But he had meanwhile fallen in with a fast young club set and was spending money more rapidly than his government or his family, or afterwards his employers, could supply it to him, and before long he had

forged the firm's check for $100 to tide him over an ugly difficulty which demanded immediate settlement. He had expected to secure the money the next day and take up the check before it should be presented at the bank, but there was a slip somewhere and the cup never reached his lips. He was arrested, convicted, and sent to prison for eight years.

For the first year or two Bergen felt his disgrace keenly. He kept to himself as much as possible. He refused to talk with either convicts or officers. He grew to be the picture of solitary and brooding melancholy. His face never lost its mournful expression during his whole term in prison, but in time he became more resigned to his lot and took advantage of the many opportunities to make himself useful which a prison offers to a man of cleverness and parts—opportunities not only to become useful, but in doing so to forget oneself also and to have that active interest in life which is, both in prison and out of it, the surest remedy for despair and the best guaranty of contentment.

Bergen was a clever musician, and before long he became the leader of the prison orchestra. He was admirably adapted for the task, and he soon had his convict musicians playing selections from the classic operas with a finish and a unity which were marked. To see his lithe figure and melancholy face as he waved the baton was to see a man who was throwing his soul into the effort, and who for the moment was living among spiritual and eternal harmonies far removed from dull earth.

Bergen's orchestra was a source of surprised delight to the many visitors who passed through the prison, but it never played so well as when Mrs. Booth came to the institution on periodical visits among her "boys." Then it was that the prison walls echoed and reechoed with the beauties of Tannhauser and Il Trovatore and Martha. The orchestra would station itself in the great rotunda or central court of the prison; on the first gallery above would sit the warden, his distinguished visitor, who was sometimes accompanied by General Booth and always by her secretary, and a few invited guests from the town outside; on the third gallery would stand some of the officers and such of the convicts as were free from the nature of their duties to indulge themselves in this privilege. Mrs. Booth was the idol of every musician's heart, and those fellows played as though inspired when she sat above them and smiled her delight over the reception, and her deep interest in the men themselves.

Bergen was a fine linguist also. He spoke English perfectly, with scarcely a trace of accent; he knew French and German equally well, and he had a good workable conception of Latin and Greek. He was my teacher in French for a year, and incidentally this statement illustrates another advantage of prison life. To have men at ready call who could instruct me in almost any branch of human knowledge was a great treat, and it was a further convenience that they came to my study instead of my going to theirs. Nor do I need to point out the pleasure of having private tutors in your own chambers without the necessity of paying more or less handsomely for the service. The arrangement with Bergen, however, was mutually agreeable. It was a pleasure for him to leave his cramped cell and spend an evening in an atmosphere which was at least comparatively comfortable, intellectual, and independent.

But Bergen was not only a musician and a linguist. He was a clever draughtsman also, and he drew many plans for the rearrangement of the prison buildings. In divers other ways he showed his versatility and skill, and he was a most useful man about the prison. I must not neglect to say, in connection with his musical work, that he composed two or three orchestral selections while he was there and spent hours in transcribing the music for the different instruments and players. One of these compositions I well remember, and it had a mournful, solitary, despairing beauty which stamped it as the expression of Bergen's sad personality.

Bergen certainly had the artist's soul and temperament, and history and biography teach us that such temperaments are unstable, passionate, and often immoral. With all his fineness of spirit, his high breeding, and his pride of self, Bergen at bottom was not moored fast to any solid moral convictions. After he left prison I am told that for a few years he had a remarkable success, but he seems later to have cut loose from it all and to have reached the second sad stage in his career. His engineering and architectural skill and experi-

ence gained him (with Mrs. Booth's assistance, I believe) a good position in some industrial enterprise, and within a year he supervised the building of a large plant and afterwards became manager of it at an annual salary of five thousand dollars. This experience was repeated with another plant a couple of years later, and Bergen's friends were delighted at the noble and successful manner in which he was acquitting himself and wiping out the disgrace of one false step.

But, alas! he suddenly threw it all overboard and disappeared from view. Shortly after leaving prison he had married a relative of one of the officers, a girl whom he had seen occasionally in the prison where women are rarely in evidence, and where one's susceptibilities are keyed up by loneliness and by the absence of feminine companionship. It is always a dangerous experiment for the artist temperament to marry, for the conditions of success are so exacting that they are rarely met; and in Bergen's case the experiment was apparently a ghastly failure. Not long afterwards he deserted his wife, went no man knew exactly where, burned his bridges all behind him, and is now either suffering despair for the second time in his career or is breathing the air of spiritual liberty and independence again. I am told that he has committed crime once more, but my informants, when pinned down, are not able to give any of the details or to confirm the rumor.

THE STORY OF A YOUNG GERMAN.

And finally let me tell more briefly of young Brunig—another foreigner, but this time a German. Brunig was of an entirely different type. While well educated, well bred and capable, he lacked the versatile ability of Bergen, and he had his feet planted firmly upon the earth of materialism and practicality. Brunig had come of a good family in Germany. His father was a banker. The boy had gone through the schools of his country and had graduated from the "gymnasium." It had then become his duty, as it is the duty of every German youth, to spend at least a year in the German army. At this fate he demurred and to escape it he came to the United States, and, with his father's influence, secured a position in a large banking house. The old gentleman thought it would be wise for the boy to learn the English language thoroughly and to become familiar with American methods and conditions—a training which would later on serve him in good stead in taking up his father's business in Germany.

For a year or two all went well. But, like Bergen, the young chap fell in with a fast set and they unintentionally accomplished his ruin. The pace was faster than he could travel. He got fearfully into debt, and a gambling experience one night, where he lost a hundred dollars, egged him on to a desperate act the next morning. He forged his firm's signature to a letter of credit for $1500, changed his name, took the train for another city, secured there by good luck or by sublime "nerve" $800 on the letter, and then, throwing discretion to the winds, began traveling through the country like a lord. He succeeded in tapping the letter of credit again for $200, but this proved his ruin. In the midst of luxury and riotous living he was in danger, and before he knew it blue-coated officers of the law swooped down upon him and he wound up in a prison cell.

Brunig was a good bookkeeper and accountant, and we gave him a position in the hospital with charge over certain dispensary and medical records, and he worked faithfully and well. His desk was connected by a bell with my office, and I had only to push the button to secure his presence and enlist his eager desire to be of any service. He was a clean-cut young German of pleasant manner. Removed from all temptation, not thrust among others with more money than he, exempt from undesirable associations, he would never have gone wrong. The crucial moment came and he was not strong enough to stand the test. Judge Ben. Lindsay, of the Juvenile Court of Denver, who has had such remarkable success in reforming the boys of his city, has largely proceeded on the assumption that in nine cases out of ten a boy who commits a theft does so, not because of a criminal nature, but because of the double force of temptation and association, and that nearly every boy would do likewise when placed under the same circumstances. He has accordingly endeavored to remove the causes of juvenile crime so far as possible. I believe, too, that it was Poor

Richard who declared that it was much easier to be honest when your pocketbook was full.

But Brunig had learned his lesson. He had profited by his experience, and he determined like a sensible man not to waste time in vain regrets but to go out from prison and redeem himself. He has since done so with entire success.

SOCIAL CLEAVAGES IN PRISON.

It is perhaps neeedless to say that the prison was not populated altogether with such men as I have described. They were of course the exceptions, as most of them, indeed, would be in the world outside. It may perhaps be well to explain that a prison is not and cannot in practice be an absolute socialistic democracy, however feasible and necessary this may seem in theory. There are a great many special positions around a prison which convicts can fill successfully — more successfully, indeed, than the average guard or keeper; and it is the part of economy and wisdom to accept this fact and make the best of it. Between such men and the mass of convicts there is at once the same division which manifests itself in society—and a prison is in a sense a section of society on a miniature scale. The men who have the brains, the experience, and the breeding secure the fruits of them here as elsewhere. They get the prize positions, and with them they likewise get certain privileges and exemptions.

The men I have been talking about belonged to this class entirely. They were not marched in lock-step to work in the shops at hard manual labor all day long, and then marched back in the late afternoon and locked in their cells for the night. Within certain limits they had the freedom of the prison, and they enjoyed the association of the officers. They were not locked in their cells until comparatively late in the evening. If it be held that such men should have been punished as the others were, I answer that they *were* punished every bit as cruelly. A sensitive man feels the mere fact of imprisonment far more than a hardened criminal feels severe discipline, arduous work, and the absence of all liberties.

"MY BEST PAYING SIDE-LINE."

The Sixth of a Series of Important Articles—Phonographs and Records are Made to Pay Handsomely—An Experienced Dealer Tells How He Handles the Goods.

By ELMER BACKER,
New Ulm, Minn.

The best paying side-line on the market today is the Edison phonograph. We had to take three different types of Edison machines and one hundred records to get the agency in this city. I started in by doing some good advertising. I inserted a strong ad. in our local paper and kept it up every week, never using the same cut twice. I also had some circulars printed as shown in the illustration. These are sent to every farmer in this county and this city every month in winter and one or two in the summer. They serve to keep the phonograph uppermost in the minds of our patrons. More than one farmer has said to us: "If you don't stop sending me this circular, I shall have to buy a phonograph. My wife and children are always begging me to get one." Phonographs certainly make the long winter nights shorter and are fine for entertaining visitors.

GERMAN RECORDS.

This being a German settlement, we have many calls for German records and keep a bigger stock of them than we do of English. When a customer has picked out about half a dozen and, thinking he has enough, tells us to get them ready, we promptly put on a good number while his own selections are being wrapped up. Nine times out of ten he takes that one also. In this way we sell three or four more records than the buyer would otherwise order.

Our latest advertising scheme was to invite the three popular dance music players in the city to our store and make some records. The

next day we announced in the local paper that we had these numbers which the music lovers of the town might hear. The instruments were the violin, cornet, concertina. Well, we sold over fifty blank records inside of a week. These home-made records are put on the machine in the same way as the ordinary kind. A reproducer is set in place of the pin and the record is attached very easily. The only trouble arises when the players are not near enough to the phonograph.

THREE DIFFERENT MACHINES IN STOCK.

When a prospective phonograph buyer comes in, we have three different types of machines to offer: the Gem, for $15.00; the Fireside, for $27.00; and the Home, with a

Two sections of a three-paneled folder distributed by Mr. Pfefferle.

wooden horn, for $55.00. With these we can accommodate the poor man as well as the rich. When a customer wants the best machine made, we send to our jobber for an Amberol, a two-hundred dollar instrument, which has no horn. It is set in a cabinet about six feet high and built of oak or mahogany. A record is put on one of the machines and played. Meanwhile we describe the fine points in which the Edison excels others. It has a softer tone and requires no pin changing as does the Victor.

We have an easy payment plan for our phonograph sales, namely, fifty cents a week on machines under twenty-seven dollars, and one dollar a week for machines over that price. All people buying a phonograph on our easy payment plan must sign a contract that this payment will be made every week or month. Any time we feel that we will not get the money, we can take the phonograph back without their consent. All records must be paid for as they are bought. We grant no credit in their sale.

COMPETING WITH MAIL-ORDER HOUSES.

One of our competitors is the Babson mail-order house in Chicago. The people in the vicinity think if they send away for a phonograph, they will get it more cheaply. Instead, they pay express and one dollar and forty cents for rubbish which we give free. I sent for one of his phonograph catalogues so that I could show the people that they pay more by having a machine sent to them than they pay us. In his catalogue twelve records are offered with the machines. These records are fifty cents apiece, which is all included in the price of the machine. But when a farmer comes in and asks how many records he gets, we tell him he can have as many as he wants. He doesn't have to take just twelve. He can take two if he wishes.

The Edison Company puts out four machines under the price of fifty-five dollars. We only keep three of these, as one, the Standard, has the same spring as the Fireside. The Standard only plays four-minute records, while the Fireside plays both the two-minute and the four-minute. The smallest machine, the Gem, costs fifteen dollars, but has no double spring. It has to be wound up before one starts playing. It also has a very small horn. The Fireside is our best seller. The price is twenty-seven dollars. It has an upright horn and double spring. With this machine we also sell the oak horn, which costs ten dollars more than the tin horn. It takes the metallic sound out of the music; the tin does not. The largest machine we have is the Home, which the oak horn always goes along with, the price being fifty-five dollars. The machine also has a better recorder than the Fireside machine. Furthermore, the double spring is bigger than other small machines.

WINDOW DISPLAYS.

The Edison Incorporated has issued window displays since December, 1911. The dealer pays three dollars a month, which is the cost of putting them out. These window

displays come every month. One of our windows is always trimmed with these phonograph displays. They are a good advertisement for us and the Edison Co. We get our Edison phonographs from a jobber in Minneapolis, T. H. Tucker. We only trade with one, getting the best service this way. The records come from the same jobber in lots of one to two hundred in one shipment, usually every two weeks. We have the right to send back ten per cent of all we order every three months. This keeps our stock clean all the time.

THE PROFIT.

The profit on the records is very good. On two-minute or Standard records there is a clean profit of 40 per cent, taking 10 per cent off for breakage. On the Amberol records there is a profit of 55 per cent. These are the four-minute records.

On the same machine costing $15.00 there is a profit of 33 per cent; on the $27.00 machine the profit is 45 per cent; and on our largest the profit is 52 per cent, which is as much as any side-line can make. When we sell a person a phonograph, it isn't the last time we see him. He always returns to buy more records, and any other article that may catch his eye in the store.

One thing a person should refrain from in handling phonographs—that is, playing for loafers. It keeps the ladies away, and it is a poor policy generally to have any loafers around.

IS THIS AN AVERAGE AUTOBIOGRAPHY?

The Self-told Sketch of a Western Lad Who, Tiring of Life on the Ranch, Entertained Pharmaceutical Ambitions—Migrating to the City He Followed His Bent, Finally Becoming the Owner of a Store—How Time Worked Changes in His Views.

By an "EVERY-DAY DRUGGIST."

I spent my youth in western Kansas, herding sheep on the prairies in summer-time, going barefooted and clad in overalls. For 4 or 5 months during the winter-time I attended the district school. When herding sheep, sometimes as many as 5000 in a single herd, my only companions were my Indian pony, my faithful dog, and rifle. My only diversions were drawing designs in the sands, killing an occasional coyote or a gray wolf as it sneaked around a hill in quest of a fresh mutton dinner, the frequent killing of rattlesnakes, the watching of the prairie-dogs in their towns, many of which covered hundreds of acres, and a thousand other things of a similar monotonous nature, not the least of which was the constant and ever-changing panorama of cloud and sky and the weird, fantastic images of the mirage.

In dry seasons many were the exciting runs made to avoid the devastating course of prairie fires, and in wet seasons there was the constant danger of severe hail or wind storms before which the sheep would drift for miles, and no amount of effort could stop them. All this sounds exciting enough, but, as a matter of fact, it was one of the most monotonous lives imaginable. I know from experience.

BEHIND THE PLOW.

When I grew a little older I entered upon the farm work connected with the sheep ranch. Many a day I put in behind "Star" and "Buck," the ox team, plowing, seeding and harvesting the grain necessary to winter the sheep and to feed the horses and cattle of the ranch. I always went to school during the short winter terms. A little later I went to the school in the neighboring town, riding my horse in and out the 5 miles, nights and mornings. Then one day word was received from a relative in an adjoining State that I might come and have the advantages of schooling in a larger town and work in a store to pay my board.

This relative it happened owned a drug store, and I went, not that I preferred a drug store position to anything else, but because it offered an escape from the monotonous life of the western sheep ranch. Perhaps while herd-

ing sheep on the limitless plains, with nothing to think about except the future, the idea may have come to me that I was capable of bigger and better things, of great achievements. Where is the boy who does not have these thoughts? At any rate this opening seemed the really greatest thing in my life.

I rode the distance, over 300 miles, on my pony, sleeping out at nights with no roof but the sky, no bed but my blanket, and my saddle for a pillow. My pony was picketed out near-by.

I was then only a little boy, scarcely tall enough to see over the tops of the high, round-top show-cases which were then the only kind, but which are now seldom, if ever, seen.

COMING TO TOWN.

One can imagine the appearance a green country boy, just off the range and entirely a stranger to city ways, made as a city drug store "cubby." But no one can realize the crash of my air castles. The disillusionment, the knowledge of my own ignorance, the ridicule of my boy playmates, and the homesickness of my first year or so as an embryo druggist, all bore heavily upon me.

But, be it said to my credit, I hung on. Perhaps the knowledge that, if I gave up, it meant a return to the ranch and to "Star" and "Buck," to experience again the heat of summer and the cold of winter, mere memory of the monotonous grind of my former life, made me stick it out. Be that as it may, I staid until the "green" wore off and eventually a liking for the business began to take possession of me.

This liking for the drug business is a peculiar thing. It is like the "old man of the sea" story. If it once gets its clutch on you, you are doomed! Did you ever know of a druggist to change his profession? Mighty few ever do.

Well, I clerked for years, and all the time was possessed of one idea. I never lost sight of it. From my first day in the drug store, I looked forward to the time when I would be a proprietor. My aim was always to this point. I would think how I would do this or that if I were boss. One thing I was quite sure of. When I got to be boss, my clerks wouldn't have to work so hard nor so long as I had when I was a clerk. And when I took charge, I wouldn't toil so hard and fool around over the little things as my chiefs had done.

By and by I got up nerve enough to take the State board examination and passed. Then, of course, I got a better job, and after a while a still better one, and in the course of time attained the object of my goal. I became a proprietor.

TAKING THE REINS HIMSELF.

I have been running a drug store now for several years. I was saying the other day how my youthful views have changed. Since I have been in business for myself, I have worked harder than ever. I not only have the small details of the business to look after, but the rest of it also. I feel that no one can do anything as I want it done, all the time. I keep my clerks as long as the average druggist does. But I confess they get better offers from other places, or they prove unsatisfactory and I have to let them go.

I notice, too, that my clerks' hours are as long as others and that they seem to work just as hard.

I used to tell how I "would set things on fire" when I got to running a drug store. But there hasn't been any conflagration yet, and I have been at it for years now. I used to say that I would own a fine home and have a splendid team and carriage and live in style. I have a nice little home, but no better than my neighbors, and no one yet has seen my "splendid team and carriage." True, I had an automobile a year or so ago, a little runabout that my family and I used to go out in occasionally. But I sold it. I couldn't afford the gasoline and oil. Besides, I didn't have the time to use it. The style I used to tell about hasn't materialized either and doesn't seem to be headed my way very fast.

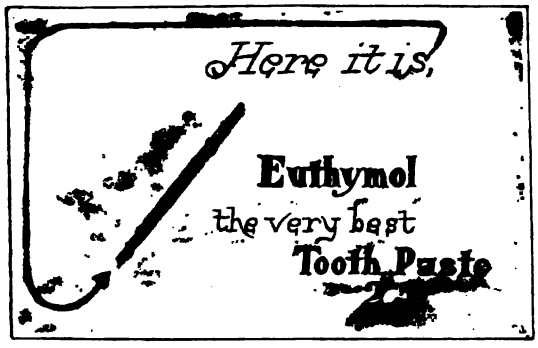
I work from early morning till late at night 365 days in the year and every fourth year 366. I am just an ordinary every-day druggist, no better off than the majority, perhaps not so well off. But I seem contented and am happy in the possession of a handsome little drug store. I am respected in the community and have confidence in my fellow-men and in myself. My home life is pleasant and happy. After all, the question is, am I a success? I don't think so. It all depends on how you look at it.

WRITING SHOW-CARDS WITH A NEBULIZER.

A "Glaseptic Nebulizer" Used for the Purpose—It Makes an Excellent Substitute for the More Expensive Air-brush—Specimens of Signs Produced with It.

By ALEX F. PETERSON,
Missoula, Montana.

From the time of making my first attempts at show-card writing, it has been my greatest desire to possess an air-brush. But the cost



of one, together with the equipment necessary to operate it successfully, has always seemed to require too large an investment, considering the limited use to which it could be put in a drug store.

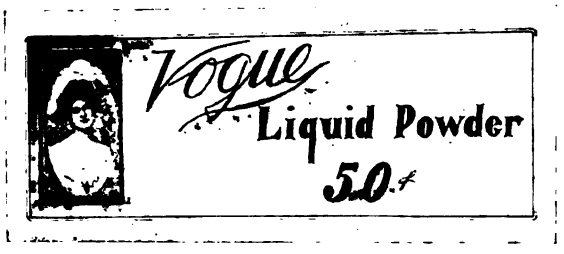
Atomizers were suggested by one card-writer as a substitute, but after experimenting

with several kinds I was compelled to give it up as a failure. These did very well in producing "spatter" work, which, by the way, helps to make signs attractive. But none threw a spray finely enough divided to give even a semblance of air-brush work. Consequently I have until recently been rubbing dry colors into the paper to produce shaded backgrounds.

HOW HE HIT UPON THE IDEA.

In demonstrating Parke, Davis & Co.'s "Glaseptic Nebulizer" to a customer one day I noticed that it actually vaporized the solution, and later in trying it with dyes dissolved in water I found that it spread the color on paper beautifully. But occasionally, on account of the density of the liquid, a few spots would appear. Then I made a solution of

Winsor & Newton's artists' color in turpentine, in the proportion of one tube of color to two ounces of turpentine. This proved to be the ideal color for this work, as it sprayed



easily, never spotted, and the shading could be graduated to any desired density.

With a few stencils cut out of manila drawing paper, creditable signs can be produced in this way in less time than with the brush alone.

HIS SPECIMENS.

I am submitting a few specimens of the work done with the "Glaseptic Nebulizer." The card advertising hair preparations was used in a window display. It was made with the use of stencils.

The headache tablet sign has a partly open box of the tablets glued on the card, and the exposed tablets are held in place by spreading a thin layer of liquid glue in the bottom of box before filling.

Appropriate pictures pasted on cards and properly shaded are much more effective than when used in any other way. The two girls on the accompanying cards were cut from magazine ads.

I trust others interested in card-writing will try this method and report their results.

A SODA WINDOW.

By H. M. CURRY,
Ellsworth, Kansas.

There was something cool and refreshing in the appearance of this window. The rocks, the flowing water, and the green grass combined to make a cool, inviting scene. Moreover, they were so different from the merchandise usually displayed in a drug-store window. Every warm and thirsty wayfarer was bound to stop before this country view. It really made a whole Chautauqua crowd "sit up and take notice."

The display was built of a pile of rocks, some old boxes and a small piece of rubber hose. To construct it requires eight or ten boxes. Arrange them in a sort of semicircular pyramid against the back of the window. On the floor set a tin tank 3 by 4 feet, 3 inches high, with an overflow pipe that reaches through the floor of the window far enough so that an old piece of hose can then be attached to it to carry off the water when it starts to run.

Next provide about four good wheelbarrow loads of small rocks of different sizes, about three square yards of sod (best taken from wild growing grass and small weeds) and one good flat rock, say 1 by 2 feet, for the fall.

Then get sufficient rubber tubing, ⅜ inch, to reach from the most convenient tap, or a barrel on the upper floor, and turn on the water over the flat stone; let it drip so as to strike onto the pan or tank.

Arrange the rocks and sod as realistically as possible, not too regularly, and cover the bottom of the window and edges of the tank with the grass. Cover the bottom of the tank with sand, so that the tin does not show through.

After this photo was made, I put in a small figure of a cow and a horse that appeared to be enjoying the cool water. They were about six inches high, and, standing in the water with their noses in the green grass on the edge of the pool, added much to the realism of the display.

The signs, of course, may be any good soda-water cut-outs, and are used to fill in the ends and back of the window. The Coca-Cola sign is suspended from a bar. The sign "Water your horse at the spring—but get *your* drink at Sherriff's soda fountain" tells the whole story. This sign looked like a fence across the front of the pool.

Use two or three ferns on top of the rocks as a finishing touch.

Some of our admiring friends say this was the best window we ever had, and although it required a little work and ingenuity, it was simple and eminently worth while.

A DRUGGIST WHO KNOWS HOW TO LIVE.

Alexander Stewart of Guelph, Ontario—Elected President of the Ontario College of Pharmacy—Pictures of His Store, His Residence, and His Riding Horse "Golden Girl."

Alexander Stewart, as the title of this article indicates, has learned the art of mixing

Alexander Stewart.

pleasure with business. He enjoys himself. Some of the accompanying pictures will illustrate the point, and if they do not, it will be made sufficiently clear throughout the course of this short article.

Mr. Stewart was born in the township of Eramosa, county of Wellington, June 7, 1866. After he had received a preliminary education in the public schools he attended the Ontario College of Pharmacy, and was graduated in the class of 1889 with a good standing. He was the gold-medalist in dispensing, and was the third member of the class in general proficiency.

His career as a clerk had begun with Alex. B. Petrie back in 1884, but after he graduated from the Ontario College he began business for himself in Guelph, and here he may still be found. In the meantime he has served on the Council of the Ontario College of Pharmacy ever since March, 1906, and in that capacity has represented District No. 7. It was in recognition of his zeal and good judgment that he was elected to the presidency last November.

In taking the chair Mr. Stewart said at that time that he hoped to make his administration one of success. The first thing he did was to recommend that a special committee of three or four members of the Council be appointed for the purpose of touring the

schools and colleges of pharmacy of the United States in order to gain ideas and suggestions which might be of possible use in

Mr. Stewart's pharmacy in Guelph, Ontario.

the further development of the Ontario College of Pharmacy. This was a specimen of the man's initiative and progressive character.

But it is not alone in the O. C. P. that Mr. Stewart has made himself useful, and has won recognition. In politics a Liberal, he has been secretary of the Liberal Association of the South Riding of Wellington. He has been an alderman of the city of Guelph. For two years now he has been president of the Board of Trade of Guelph, and he has served on the Committee of the Guelph Gen-

Mr. Stewart's residence.

eral Hospital. During his membership in the Council of the Ontario College, he has been chairman of the Educational Committee and has done excellent work in this position.

To show further that Mr. Stewart is a man of broad interests, and that he believes in living the full life, it may be said that he is a member of the following clubs in Toronto: The National Club, the Ontario Liberal Club, and the Royal Canadian Yacht Club. In the city of Guelph he is a member of the Priory Club, the Canadian Club, St. Andrew's Society, the Guelph Fat Stock Society, and the Guelph Horticultural Society. At the present time he is secretary of the Guelph Horse Show Association, and a director of the South Wellington Agricultural Society.

As a couple of our pictures will suggest,

Mr. Stewart and his beautiful horse, "Golden Girl."

Mr. Stewart is very fond of riding and driving. His riding horse, "Golden Girl," is a famous steed, and we present a couple of pictures showing Mr. Stewart astride her.

As for Mr. Stewart's pharmacy, this is one of the neatest, best-arranged, and most prosperous in the Province of Ontario. A specialty is made of hospital, physicians' and

Mr. Stewart enjoying a cross-country run with "Golden Girl."

nurses' supplies, and Mr. Stewart gets out under his own label a number of pharmaceutical and toilet specialties which apparently enjoy a sale outside of his own store.

How the Druggist's Sundries Are Made.

FIFTH PAPER: ESSENTIAL OILS.

The Industry Chiefly European—France Particularly Excels—Enormous Quantities of Flowers Collected Annually—The Various Methods of Separating the Oils and Their Bearing on the Price—Some Synthetic Products that Verge Closely on the Natural.

By DANIEL M. GROSH,
Philadelphia.

When one considers that the United States produces annually essential oils to the value of $500,000, and the little town of Grasse in the south of France twelve to fifteen times as much, it certainly furnishes food for reflection. Why this condition of affairs exists is hard to understand, as all authorities agree that we possess the necessary climatic conditions in our diversified climate both in the east and in the west. The technical and practical knowledge of floriculture and extraction of the oils is not a prohibitive proposition, nor does it require such training and experience as American ingenuity could not acquire. Furthermore, a benevolent and protective tariff would work to the interest of the manufacturer. Excluding 150,000 pounds of oil of peppermint produced yearly, which is less than one-half of Japan's contribution, the output of natural essential oils is too small to be seriously considered.

Caraway field on the right, first year, Holland.

The essential oil industry may be roughly divided into three divisions, the expression of natural oils, the fabrication of artificial and synthetic oils, and the general perfumery business. The natural production will be discussed and the artificial production considered only in relation to the natural product. It is a peculiar fact that the enormous production of the artificial products has not in any way curtailed or retarded the output or reduced the demand for the natural article. Nor has it in any way reduced the price. The price of vanilla beans remains the same, regardless of the quantity of vanillin produced. All other natural products likewise remain unaffected by competition with the synthetic products. This demonstrates that the industry is so firmly established that it has nothing to fear except competition in its own particular class.

OILS A FOREIGN INDUSTRY.

When the little town of Grasse can produce annually ten billion pounds of flowers and furnish the inhabitants with continuous employment throughout the year, it certainly seems that this great country should have some small section with equal facilities.

The industry is always sure of a demand and a market, for the substantial reason that the higher grades of perfumes absolutely require the natural product. The synthetic article may be used for the cheaper grades, but is lacking in certain essential qualities that are found only in the natural oil. Consequently, there is no danger of the natural oils being forced out of existence, as has happened to the indigo and alizarin colors in the dyeing industry.

Mowing caraway in Holland.

The industry, both in the field and factory, has been studied and experimented upon by the French producers down to the minutest detail, and they have attained absolute perfection

Extraction of bergamot oil: Group of workmen in Italy.

both in purity of product and volume of output. They continually strive to excel, both as a matter of business and self-protection, as they must keep up the quality of their products regardless of conditions and circumstances. They study out all possible influences on the growth of the plants, such as temperature, light, humidity, nature of soil, proper time of harvesting, etc., and necessarily each individual species must be studied separately.

GATHERING THE FLOWERS.

The year commencing in March and April with the violets and the jonquils, almost one million pounds of violets and about 35,000 pounds of jonquils are cultivated and gathered. In May and June come the roses; almost three and a half million pounds are gathered, which have to be picked over twice to separate the injurious pistils from the perfume-giving petals. These two months are also given to the orange flowers, four and a half million pounds. In June and July the thyme and rosemary, also the myrtle, are gathered. August and September produce 175,000 pounds of tuberose, one and a half million pounds of jasmine, 65,000 pounds of aspic, and 200,000 pounds of lavender. The red geranium appears in September and October. The floral year finally ends in October and November with cassie flowers. December, January, and February are occupied in preparing for the new year and winding up the old.

When one realizes the slight weight of a floral blossom and the number required to make a pound, the actual volume gathered yearly seems almost incredible, and yet this is from only one small section.

The process of extraction of the oils is simple and familiar to most all, and will be dwelt on but slightly. Four methods are used. There is distillation, in which the flowers are distilled with steam. The steam is condensed and the oil separated from the water, which is either used over again in a fresh charge or sold as distilled waters, of which about four million quarts are marketed yearly. For the more delicate flowers the cold maceration process is used, which produces the finest products. The flowers are macerated in the purest lard on glass plates. When the pomade, as it is termed, becomes saturated with perfume, the oil is extracted by agitation with alcohol and evaporated to concentration. The hot maceration process is similar to the foregoing method except that hot lard is used, and the pomade is obtained by filtration and pressure. The most modern process consists of using a volatile solvent, a light petroleum spirit, distilling and evaporating in a vacuum which gives the perfume in a solid form. The maceration process gives a larger volume of product than the other methods.

Ylang-ylang blossoms arriving at the works in Java.

The alcoholic concentrations are termed quintessences, and the prices depend, of course, with regard to quantity and quality, upon the extractive methods employed. A pound of violet essence extracted by the cold process

brings $1350, while by the petroleum process it costs only $160. A pound of oil of orange flowers made by steam distillation is valued at $35: by spirit distillation $72; and by cold maceration $135.

During the intervals of flower-picking the stills are kept busy with cinnamon, cloves, sandal, and other exotic plants of other localities which are imported for expression.

SYNTHETIC OILS.

The relation which the synthetic oils bear to the natural is interesting from every viewpoint. The vegetable kingdom furnishes nearly all the parent products for the manufacture of synthetic oils. Two exceptions may be noted in benzaldehyde and methyl salicylate, which are coal-tar preparations.

Vanillin is manufactured from many

Ylang-ylang oil distillation in Java.

sources, ranging from asafetida to potato peelings. About 25,000 pounds of vanillin are produced annually. The price has been so reduced that it is hard to realize that but a few years back vanillin was worth $55 a pound. The laboratory has given us heliotropin, which supplies a perfume different from that made from the natural oil of heliotrope. It is made from saffrol, which itself occurs in oil of sassafras and camphor oil. Terpineol with its lilac odor is obtained from turpentine after many reactions. It is another well-known product. The rival of the violet is found in ionone, made from oil of lemon and lemongrass oil. Isoeugenol gives the replica of the carnation, and so on down the long list of floral odors which are successfully fabricated and fulfil many requirements, especially soap-making. In that industry the synthetic oils often give better satisfaction than the natural, being more resistant to the action of the alkalies. It is astonishing that the large and constantly increasing amounts of synthetic oils marketed and used have in no way reduced the demand or output of the natural product, or at least influenced the prices. Not only has the price been maintained, but the cultivation and production have been greatly increased and larger quantities imported.

The prime requirement in both natural and artificial goods is absolute purity. Notwithstanding this fact, the oils imported to America have been grossly and scandalously adulterated. Fortunately the laboratory can by scientific methods determine and ascertain the quality.

THE OLFACTORY SENSE.

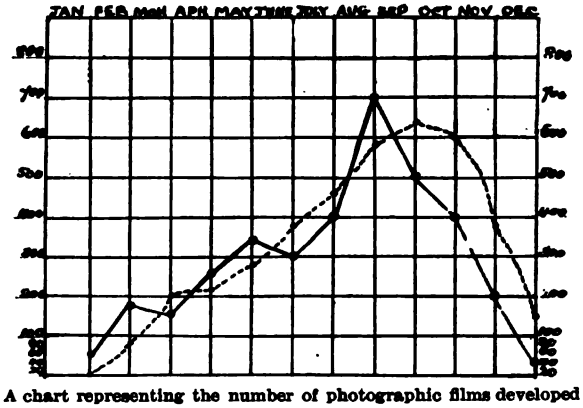
The manufacture of perfumery or the blending of odors is so extensive as to be beyond the scope of an article of this nature. The great or successful perfumer is, like the poet or musician, born, not made. The odors may be compared to the notes of the musician or the colors of the artist. An impure odor like a false note or a wrong color may destroy an otherwise perfect combination. The sense of smell becomes so trained and acute as to be developed into a special gift of nature in itself. Odors may be qualified or distinguished only by the individual nasal organ. They cannot be recorded, measured, or qualified mechanically as can heat, light, sound, or sight. The created perfumes are a blending of the various oils and essences, and no single odor alone has the necessary perfume requirements, namely, penetration, persistence, and pleasantness.

DOLLAR IDEAS

A GRAPHIC METHOD OF RECORDING SALES.

Ernest C. Cripps, Berkhamsted, England: All druggists who market their own specialties should have some method of recording the sales of these goods. So far as the actual numbers of bottles or packages are concerned, if an account of every dozen put up is kept, the number left in stock at a given time will show the actual sales. But something more than that is needed. One wants to know at a glance whether sales are increasing or decreasing, and also in what month one should expect an increase or decrease. Furthermore, if less goods were sold than in the corresponding period twelve months ago, one will want to know the cause.

I have found that the best method of tabulating and comparing such records is by re-



A chart representing the number of photographic films developed in two successive years.

sorting to the method now adopted in our schools in teaching mathematics—*i.e.*, the graphic chart. An explanation of the accompanying illustration will make the method quite clear. The paper, ready ruled, can be easily obtained. It is divided into small squares by horizontal and vertical lines. The heavier vertical lines represent the months of the year, while the heavier horizontal lines may stand for 10, 50, or 100, as the sales of the special preparation are large or small. The smaller horizontal divisions represent 2, 10, or 20, as the case may be. If it is required to record the weekly sales, the vertical divisions must be subdivided into four. Figures at the side may be placed for convenience, and the months at the top and bottom.

Each chart may represent a year; or several years' records may be depicted upon the same piece of paper if colored inks are used. This latter method is the more useful, as variations can be seen at a glance.

The accompanying chart represents the number of photographic films developed last year, and the dotted line that of the previous year. There is no end to the uses to which this method may be put.

WATER-PROOFING LABELS WITH COLLODION.

J. F. Rupert, U. S. Navy Hospital Corps, U. S. S. Helena, Asiatic Station: I have found collodion a very fine preparation for rendering labels water-proof. While my experience has been mostly with typewritten labels, I have found that it works perfectly with hand-written labels.

Collodion may be applied with a camel's-hair brush which has been inserted into the cork and kept moist by immersion in the containing bottle. It may be applied immediately after the label is affixed.

Collodion prevents soiling of the label, and adds much to the life of the written label, which is of interest both to patient and dispenser. Bottles with labels so treated can be washed with impunity without danger of soaking off the label. Especially is this a help in keeping stock bottles which may become soiled neat and clean. However, it must not be understood that the preparation will stand prolonged soaking in water. Nevertheless, even this strenuous test, while it will soak the label from the bottle, will not affect the label itself, and it can be used even a second time after being detached from the bottle.

Labels on pill boxes, ointment containers, etc., may also be treated conveniently with an application of this preparation to the utmost advantage.

The flexible collodion I have found superior to the plain. The collodion solution should be quite thin and applied quickly without rebrushing of any part; it dries almost immediately.

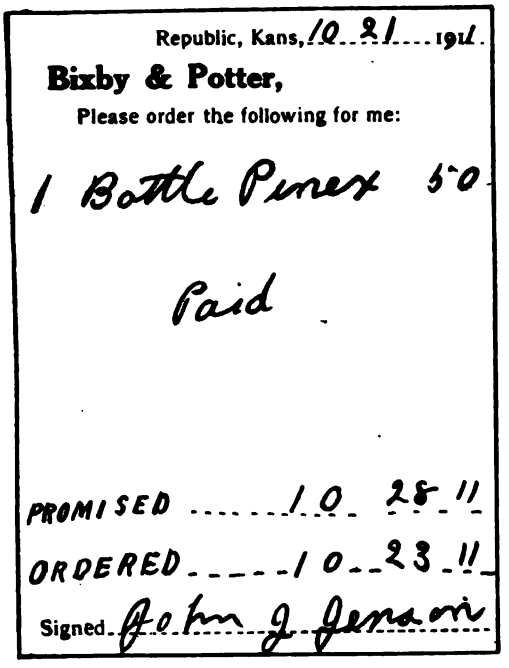
Collodion also makes an excellent sizing

for labels which are afterwards varnished and also for notices exposed to the weather which are to be varnished. It entirely prevents staining of the paper by the oil of the varnish and prevents the paper being rendered transparent.

Grain alcohol shellac is also a good article to coat labels with, but requires more time to dry.

A SPECIAL SLIP FOR ORDERING "SHORTS."

Bixby & Potter, Republic, Kansas: When a customer requires an article not in stock we fill out a slip according to the form here shown and place it in a pigeonhole marked "To


Republic, Kans., 10 21 1911.

Bixby & Potter,

Please order the following for me:

1 Bottle Pinex 50

Paid

PROMISED 10 28 11

ORDERED 10 23 11

Signed. John J. Jensen

Order." Then each evening we go through these slips and include the missing items on our regular order for goods. We stamp the date of the order on the slip and place it in a pigeonhole marked "Ordered."

When the goods arrive, we wrap the slip around the article to which it belongs, bind with an elastic, and lay the package aside until called for. Or if necessary, we notify our customer the article has come in.

This is the only piece of advertising we have gotten into the schools. Our teachers all have a quantity, and numerous orders come in for books and supplies. Slips cost us $1.50 for 2000.

A FIRELESS COOKER FOR THE PHARMACY.

Hugh M. Reid, Chicago, Ill.: A good fireless cooker will be found a valuable adjunct to any pharmacy. The uses to which it may be put are varied. Benzoinated lard, for instance, if the pharmacopœial process is followed, will be found tedious to make. But the following process simplifies things somewhat: Heat the lard in the cooker kettle to the required temperature or a little above, add the benzoin, cover, and let it stand in the cooker for a few hours. This does away with the costly and inconvenient water-bath. The time required in the manufacture of some of the tinctures which are prepared by maceration can be materially shortened if the menstruum is first warmed and the maceration continued in the cooker. The principle can be extended to a number of other preparations, such as soap liniment and camphorated oil. In a good many cases the cooker may be replaced by a good Thermos or other vacuum bottle.

TO RESTORE YELLOW WOOD ALCOHOL.

J. A. Scott, Glencoe, Ontario: Dip the point of an ordinary indelible copying pencil into the colored alcohol sufficiently to impart a small quantity of the methylene blue to the wood alcohol. Shake, and the methylene blue will instantly neutralize the methylene yellow, restoring it to a perfectly water-white product. Care must be exercised in order that the quantity of the violet dissolved from the lead-pencil be sufficiently small.

WHITING FOR WINDOW SIGNS.

Lew Gerould, Towanda, Pa.: I use a great deal of whiting for making signs on our windows both outside and inside. When making whiting for use on the outside, I add a small quantity of powdered acacia. This hardens the mixture so that when dried it cannot be rubbed off by an inquisitive passer-by. When the window is cleaned, however, the whiting is easily washed off.

MRS. MURPHY: "So your son Dinnis fell from his airyoplane? Sure, Oi thought he was learnin' to fly in a corrispondence school."

Mrs. Casey: "He was, but he sthopped short in the middle of a lesson."—*Lippincott's.*

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

INTERESTING LETTER FROM A READER IN THE AFRICAN TRANSVAAL.

To the Editors:

You frequently ask readers to write you about their business, and I am taking advantage of a quiet afternoon to have a sort of one-sided chat with you. Of course, you know that the drug business here is very different from what it is in your country. Judging by a number of your articles, there is not such a terrible rush to get to the end of one's life here as with you, although we are supposed to live at a fairly high pressure.

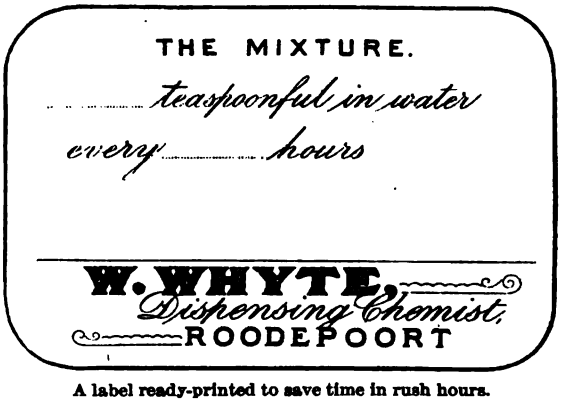
We chemists in the Transvaal have quite easy hours compared with the rest of South Africa and other countries. We have a shop hours' bill which includes all businesses. This is how it affects us: There is no specified opening hour, but the usual custom is to open at 8 or 8:30 A.M., according to the trade in the different towns. The bill, however, specifies Sunday and holiday hours. On Monday, Tuesday, Thursday, and Friday the closing hour is 8 P.M. On Wednesday we close at 1 P.M. and open again from 7 to 8 P.M., and Saturday hours finish at 9 P.M.

Here closing is compulsory, and non-compliance is punishable by fine. This is no hardship to pharmacists, as all businesses, except tea rooms and fruit stores, must close at the same hours. Of course we are allowed to supply medicines and medical sundries at any hour. The term medical sundry might be applied to almost any article in a pharmacist's store. Night calls are not frequent.

In one of your recent issues I read of the correct way of dispensing a prescription. The article in itself was an excellent thing and the advice good if you have lots of time. It mentioned careful copying three times, checking, etc. It would not be workable in every dispensary. Many stores around this part do a private as well as a Benefit Society trade in the prescription line. In supplying the latter there is no time for copying nor checking except by the one who dispenses, and a slow compounder is of no use. The four doctors who prescribe in this town have their evening consulting hour from six to seven, and the majority of patients prefer that hour to the morning or afternoon. Consequently quite a rush of prescriptions and orders arrive just before closing time, and I can assure you that the patients are anything but patient if kept waiting.

To facilitate dispensing we keep as many things ready as possible, such as various salts in solution, printed labels, doctors' favorite mixtures made up, and a few other helps.

As regards Benefit Societies or Sick Clubs, these are chiefly connected with the mines here. The committees of each call for tenders, annually, from the various pharmacists in the vicinity. We are usually asked to tender at so much per prescription. These prices



A label ready-printed to save time in rush hours.

vary quite a lot along the stretch of some 60 miles of reef, within which area work most of the miners at present. Some societies are supplied as low as 7d. (14 cents), and others as high as 1/6 (36 cents). This includes bottles, etc. Not prices to make any one's mouth water. How do your societies' tenders compare?

In the towns outside of Johannesburg, pharmacists frequently go in for such sidelines as tobaccos, sweets, stationery, seeds, school requisites, periodicals, etc. Of all these articles I find the flower and vegetable seeds the best paying. There is a good demand, no waste, and the goods are all ready in packets. The profit is about 100 per cent, and I have an agreement to have all seeds exchanged for fresh packets once a year, about July. That is our mid-winter, a time when there is not much sale for this line. I have catalogues de-

tailing the kinds and prices, and always make a good window show with plants, cards, tools, dummy packets, etc.

You have occasional inquiries for a paste to stick labels on tin. I have used the B. P. tincture of benzoin compound for a long time and find it good. A drop or two on the tin lid and a blow with the breath to hasten the evaporation of the spirit, then the dampened label placed in position, and the tin and label stick together as long as any one will desire.

I have received many tips on store management generally from your paper, and find each issue most enjoyable reading.

Roodepoort, Transvaal. W. WHYTE.

MORE SHOW-CARD SPECIMENS.

To the Editors:

I submit a photograph of some signs I have made. I was prompted to send it to you after

A specimen of Mr. Dudley's sign work.

seeing the article on show-card writing on page 261 of the June BULLETIN in "Business

Mr. and Mrs. Dudley.

Hints." I am also sending you a picture of the "artist" and his wife.

My work is done mostly with the air-brush, which any one can master if he has patience. It requires practice, and the first outlay is considerable, but the results are most gratifying.

The small printing is done with a Sonneken pen, which is very rapid and can be readily learned. J. JAY DUDLEY.

Superior, Wis.

REMOVING LYE STAINS FROM THE NAILS.

To the Editors:

As is well known to most people, immersing the hands in strong solutions of lye will cause the nails to turn jet-black. As the human nature runs to doing things easily, persons possessed of that tired feeling are prone to attempt to remove dirt, grease, etc., by the liberal use of lye.

Lye solutions are often resorted to in the operation of removing paint from metal surfaces which has been applied to prevent rusting. Unless special care is exercised, the usual result is the undesirable dyeing of the nails.

Peroxide of hydrogen, commercial solution, will remove these stains almost instantaneously. When used full strength, it will bleach out a disgusting stain, which has been present only a short time, like magic.

Stains of several days' duration can be removed in a few minutes by a little rubbing, much to the delight of the customer.

Here is an idea for the druggist, ever awake to an opportunity to add a few shekels to his strong box. J. F. RUPERT,
U. S. Navy Hospital Corps.

U. S. S. Helena.

MAKING CASTOR OIL PALATABLE.

To the Editors:

The dispensing of castor oil over the counter or at the fountain has frequently been discussed in the BULLETIN and other papers. In my store I have no fountain, but I use what I think is the best of all methods of dispensing castor oil so that it will slip down without being seen, smelt, or tasted. It is as follows:

In a glass place about 15 grains of sodium bicarbonate, add about 4 drachms of peppermint water, and dissolve by agitation; next add about the same quantity of syrup of sarsaparilla compound or a similar tasting syrup made for the purpose; agitate again, and add the desired quantity of castor oil. Next take

about 10 grains of tartaric acid and carefully place it close to the glass at one side, and then pour upon it a small quantity of peppermint water. This dissolves the acid and carries it down, when the oil is completely enveloped in a copious effervescence. Do not stir, but let the drink be taken right down, the oil being in a large globule in the center.

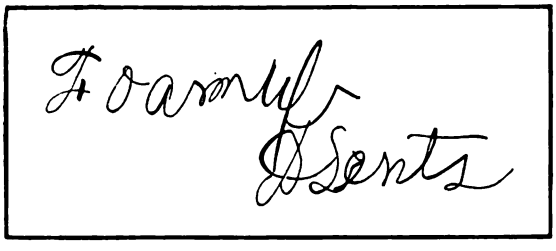
People come to me from all around to get castor oil as I dispense it.

Brooklyn, N. Y. WILLIAM F. MORGAN.

HERE'S A NEW ONE!

To the Editors:

I am sending you an order which was handed to my clerk, F. P. Theriot, the other day. "Foam up—5 cents" is certainly a unique



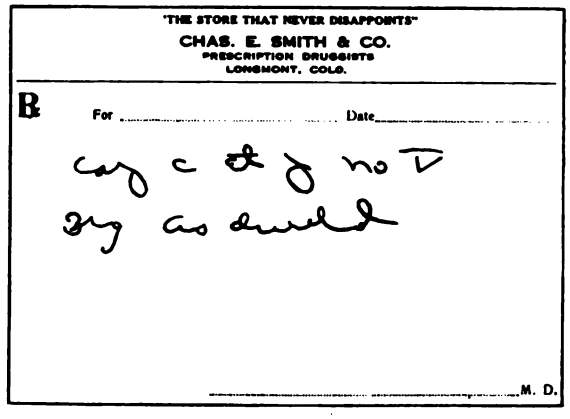
method of calling for hydrogen peroxide. At any rate, this product was dispensed, and the customer wasn't heard from again.

Gretna, La. JOS. OPLATEK.

A CHINESE PUZZLE.

To the Editors:

We are sending you a Chinese puzzle, although it is not the product of a Chinese physician. It is a type of freak which we get



quite frequently. It is interpreted by its author to call for calomel 1 grain, and phenolphthalein 3 grains.

CHARLES E. SMITH & Co.

Longmont, Colorado.

To the Editors:

I want to say that I enjoy reading the BULLETIN. I consider it the best pharmaceutical journal published. I. S. ZELUFF.

Brooklyn, N. Y.

TREATING HUMAN ILLS IN EAST INDIA.—This shows one of the native healers ready for business on one of the public streets or squares of a city in India. With his armamentarium spread out before him, he is ready to cure diseases on the spot and without delay! Healers of this type do a large share of the practice in India.

THE SODA FOUNTAIN.

PRIZE SODA FORMULAS.

Here are some prize soda formulas for which *The Soda Fountain* paid a dollar each:

THAT MYSTERIOUS SUNDAE.

Make a paste of thick syrup by boiling together a pint each of white cane syrup and lukewarm water with four pints of granulated sugar for four minutes. Beat the whites of four eggs to a stiff froth, and to the mixture gradually add the syrup, stirring rapidly until free from lumps. To prepare the sundae, place a split banana upon an oblong dish, and on it put a No. 10-to-the quart dipperful of vanilla ice cream. Over all pour a ladleful of the syrup first described; on top of the ice cream put a few drops of chocolate syrup, which will serve to "stripe" the sundæ.

BANANA NUT AND FRUIT SUNDAE.

Slice a good ripe banana in halves and place the pieces flat side down on an oblong hand-painted china plate; between the slices put a 20-to-the-quart mold each of vanilla ice cream and chocolate ice cream; over one of these pour some chopped pecans, and over the other some pineapple fruit. Place a cherry on each side of the molds of ice cream and top off with whipped cream. On top of the cream put a few fresh pecan meats.

EASTER SUNDAE.

Cover the bottom of a small round china plate with several leaves of lettuce; upon these place a "bird's nest" prepared with finely spun candy. In the nest place a 12-to-the-quart mold of vanilla ice cream in the form of a setting hen. Around and partially under the hen put red, white, and green cherries to represent Easter eggs.

BUTTER-SCOTCH PECAN FUDGE.

Cook over a slow fire until the mixture comes to a boil 2 pounds of sugar and 1½ pints of milk; then add ½ pound of butter, stirring until dissolved, a teaspoonful of table salt, and color a light shade with caramel; slowly pour in two teaspoonfuls of lemon juice and three handfuls of pecans. When cool, serve a scoopful on a cone of vanilla ice cream, and "dress" with whipped cream and a cherry.

SOME SELECTED FORMULAS.

EASTER SPECIAL SUNDAE.

Separate the yolks from the whites of eight eggs; beat the yolks very lightly, add 2 cupfuls of sugar, the grated rind of 1 lemon, and the juice of half a lemon; put into a double boiler and boil until a thick mixture is produced; then add 6 ounces of concentrated black raspberry syrup and a little color. Beat up the whites of the eggs, add to the mixture, and whip until very light. To serve, take a No. 12 disherful of ice cream in a sundae dish, and over it pour a ladleful of the raspberry foam, topping off with whipped cream and a whole cherry.

STRAWBERRY DREAM.

In the center of a six-inch plate put a No. 8 mound of strawberry ice cream, and over it pour a ladleful of crushed strawberries. Around the base make a double circle with whipped cream. Into the cream drop a few whole strawberries.

RAINBOW PHOSPHATE.

Into an 8-ounce glass put ½ ounce orangeade, ½ ounce pineapple syrup, ½ ounce raspberry syrup, and 1 dash of phosphate; then fill the glass with carbonated water.

STRAWBERRY FRAPPE.

Beat the whites of 8 eggs to a froth and mix with 2 pounds of pulverized sugar and ½ gallon of crushed strawberry. To serve, place a small scoopful of vanilla ice cream in a large sundae glass. Pour over the top two ladlefuls of the strawberry mixture and decorate with a maraschino cherry.

MONT BLANC.

Strawberry syrup, 1 ounce; orange syrup, ½ ounce; vanilla syrup, ½ ounce; grape juice, ½ ounce; shaved ice, ½ glassful. Place all in a 12-ounce glass, fill with carbonated water, and top off with whipped cream. Serve with a spoon.

ATLANTEAN COOLER.

Sherbet syrup, 1 ounce; red orange syrup, ½ ounce; shaved ice, 2 ounces; place in 8-ounce glass, fill with carbonated water, coarse stream. Serve with a straw.

NABISCO NUT SUNDAE.

Ground pecans, ½ pound; heavy cream, 1 quart; extract of vanilla, ½ ounce; crushed pineapple, 8 ounces. Mix, place in a bowl, which set in ice on the counter. On the side have a cup of crushed Nabisco wafers and top off the sundae with them.

ROSE TULIP PEACH.

Rose syrup, ½ ounce; pineapple syrup, ½ ounce; orange syrup, ½ ounce; sweet cream, 4 ounces; shaved ice, ½ glassful. Shake, strain, toss, and serve. Dress with whipped cream.

PINEAPPLE FRAPPE.

Pineapple syrup, 1½ ounces; ice cream, 2 ounces; sweet cream, 3 ounces; cracked ice, ½ glassful. Shake, strain, toss, and serve.

STRAWBERRY TARTLETS.

Fill shells of fine pastry with fresh strawberries dusted with powdered sugar. Flavor some stiff, beaten cream with a little orange or pineapple juice and heap it over the berries. Then sprinkle with a small quantity of macaroons and serve immediately.

PERCY'S FAVORITE.

Pineapple syrup, ½ ounce; raspberry syrup, ½ ounce; vanilla syrup, ½ ounce; 1 egg; shaved ice, ½ glassful; milk to nearly fill the glass. Shake well, strain into a 12-ounce glass, and fill with carbonated water, fine stream. Sprinkle powdered nutmeg on top.

COFFEE FLIP.

Into a 12-ounce glass put 1½ ounces of coffee syrup; add 1 fresh egg, 1 teaspoonful malted milk, ½ glassful shaved ice, 1½ ounces sweet cream or a ladleful of ice cream; shake, and when the ice cream is dissolved,

strain into a 12-ounce glass, and nearly fill with carbonated water, coarse stream, finishing with fine stream.

CLARET LEMONADE.

Into a 10-ounce glass put 2 ounces shaved ice, the juice of 1 lemon, and 2 ounces claret syrup. Shake well, nearly fill the glass with carbonated water, stir, strain, add one slice of lemon and enough carbonated water to fill the glass; serve with two straws.

TEXAS FRUIT PUNCH.

Put a large cake of ice in a punch bowl and add the juice of 3 lemons and 3 oranges, 2 quarts of claret syrup, 1 quart of champagne syrup, and ½ ounce of fruit acid; then add to the mixture thin slices of 1 orange and 1 lemon. Use a ladle and serve 2 ounces in a phosphate glass, filling with carbonated water, coarse stream.

FROZEN FRUITS.

Take of the ripest of raspberries, currants, or strawberries, as desired; press the fruit through a hair sieve into an earthenware crock. To every 5 pounds of pulp, add 2½ pounds of sugar, 1 quart of water, and the juice of 2 lemons or oranges. Freeze in the same manner as you would ice cream, and when frozen, put it at once into porcelain-lined cans or an earthenware dish, well packed in ice and salt.

SPECIAL CHERRY MILK.

Cherry syrup, 1 ounce; banana syrup, ½ ounce; whipped cream, ½ ounce; shaved ice, a sufficient quantity. Place in a 10-ounce glass, fill with milk, and serve with a spoon and straw.

CHOCOLATE FLUFF.

Vanilla cream, 1 ounce; chocolate syrup, 1 ounce; whipped cream, 1 ounce; fill glass with carbonated water, add a red cherry, and serve with a spoon and straw.

AMERICAN FRAPPE.

Mint syrup, 1 ounce; wintergreen syrup, 1 ounce; sweet cream, 1 ounce; 1 No. 16-to-the-quart ladleful of vanilla ice cream; shake well, strain, fill glass with carbonated water, fine stream, and top with whipped cream. Serve in regular frappe style.

BISMARCK SUNDAE.

Into a sundae cup put a ladleful of vanilla ice cream and then add some chopped dates and figs. Over these pour some maple syrup and top off with whipped cream.

BLACK HAWK SUNDAE.

Mix crushed blackberries with grated black walnuts and place them in a sundae dish containing a dipperful of vanilla ice cream; top with whipped cream and 1 maraschino cherry.

STRAWBERRY SHORTCAKE FRAPPE.

Purchase a cake of "angel food," 18 inches long. Cut it into thin slices, put a slice on a plate, and on the cake place a small cone of cream; cover with strawberries and top off with whipped cream. If a suitable cake cannot be obtained, use Nabisco wafers.

HIGH SCHOOL SUNDAE.

Take three portions (No. 16 disher) of vanilla or chocolate ice cream and place them to mark the points of an imaginary triangle drawn on a flat ice-cream saucer; then place some whipped cream in the center and sprinkle over with finely chopped walnuts, or a maraschino cherry may be used.

ARCADIAN DREAM.

Into a 14-ounce glass put 3 ounces of shaved ice, a small spoonful of ice cream, 1 ounce of milk, ½ ounce of vanilla syrup, 1½ ounces of Catawba syrup, and a teaspoonful each of crushed raspberries and crushed strawberries. Shake well, then fill the glass with carbonated water (fine stream), and serve with a spoon. Sells for 15 cents.

ALABAMA SPECIAL.

Pineapple syrup, 2 ounces; grape juice, 1 ounce. Place in a 14-ounce glass, add the juice of half a lemon and 2 ounces of lemon ice. Fill the glass with carbonated water, fine stream, and mix. Decorate with a cherry and serve with a spoon.

SOME IDEAS FOR THE FOUNTAIN.

By George Galane, Newark, N. J.

I have a novel and attractive display in our window advertising the soda fountain. It is attracting a great deal of attention on the part of the public, for amazement is expressed at the never-melting ice cream. This ice cream consists of plaster of Paris and water, made into a paste and molded to the likeness of a scoop of ice cream.

Upon the artificial ice cream I have crushed fruit, nuts, cherries, etc. Some of the dishes are:

Cantaloupe sundae.
Strawberry sponge.
Banana split.
Fruit salad.
Fruit sundae.
Sliced peach sundae.

Beside each dish I have a placard, hand printed by myself, giving the name and price of the dish.

CANTALOUPE SUNDAE.

I find the special cantaloupe sundae a good seller. The price is 15 cents. Take half a cantaloupe, remove the seeds, put ice cream in it, add fruit and whipped cream and serve.

These weekly displays in the show-window are bringing many new customers to our fountain, who go away perfectly pleased with the sundaes and the service.

In Menk's Pharmacy, where I am employed, we use a menu at the fountain. It reads as follows:

MENU.

Sundaes.

Banana Split	15c
Broadway	10c
Cherry	10c
Cherry Nut	10c
Chocolate	10c
Chocolate Marshmallow	10c
Chocolate Fudge	10c
Chocolate Nut	10c
Chop Suey	10c
Fruit Marshmallow	15c
Fruit Salad	10c
Grape	10c
Lemon	10c
Malted Milk	10c
Marshmallow	10c
Mint	10c
Nabisco	10c
Nut Pudding	10c
Orange	10c
Peach	10c
Pineapple	10c
Raspberry	10c
Raspberry Nut	10c
Strawberry	10c
Strawberry Nut	10c
Strawberry Sponge	10c
Turkey Trot	15c
Tutti Frutti	10c
Vanilla	10c

Lemonades.

Egg	15c
Fruit	10c
Grape	10c
Lemonade (Plain)	10c
Mint	10c
Orange	10c
Seltzer	10c

Ice Cream Sodas, 10c.

Cherry.
Chocolate.
Chocolate Mint.
Coffee.
Ginger.

Grape.
Lemon.
Mint.
Orange.
Peach.
Pineapple.
Punch and Judy.
Raspberry.
Sarsaparilla.
Strawberry.
Vanilla.

Specials.

Broadway Flip 20c
Chocolate Flip 20c
Chocolate Float 15c
Coffee Flip 20c
Coffee Float 15c
Frozen Mint 10c
Grape Punch 10c
Vanilla Flip 20c
Vanilla Float 15c

Egg Drinks.

Egg Broadway 10c
Egg Chocolate 10c
Egg Coffee 10c
Egg and Cream.....15c
Egg Flip 15c
Egg Lemonade 15c
Egg Limeade 15c
Egg Malted Milk.....15c
Egg Nogg 10c
Egg Orangeade 15c
Egg Phosphate 10c
Egg Vanilla 10c

Phosphates.

Cherry 5c
Grape 5c
Lemon 5c
Mint Rickey 5c
Pineapple 5c
Raspberry 5c
Strawberry 5c
Cherry Smash 5c
Coca Cola 5c
Moxie 5c
Root Beer 5c
Punch and Judy..... 5c

Milk Shakes 5c and 10c.

Chocolate.
Cherry.
Coffee.
Peach.
Pineapple.
Raspberry.
Strawberry.
Vanilla.

Mineral Waters.

Abilena 15c
Apollinaris 15c
Buffalo Lithia 10c
Congress 15c
Hunyadi Janos 10c
Imported Vichy 10c
Pluto 10c
Red Raven Splits.....15c
Saratoga Vichy 10c
Veronica 15c

SOME ICE CREAMS.

CHOCOLATE.

Melt 10 ounces chocolate and make a paste of it with hot water to keep it warm until wanted. Cook 1 dozen eggs and 1½ pounds sugar in 2 quarts cream. Add the chocolate and work it in while hot; cool and freeze in the usual way.

ORANGE.

Four quarts of cream, 2 large oranges and 1 lemon are required, with an addition of 2 pounds of sugar. Secure the orange flavor by rubbing off the rind on lump sugar. In default of hard sugar you may grate off the yellow skin on a grater. Be careful not to rub off the white pith beneath the surface. By using sugar, you will have the essential oil embedded in it, producing a flavor in all its purity and strength. This mixed in turn with the juice will give a rich flavor for either confection, beverage, or cream.

STRAWBERRY.

Take four quarts of cream, 2½ pounds of powdered sugar, enough ripe strawberries passed through a sieve to make one quart of juice and mix them all together. Add a little color if necessary, although fresh berries need little coloring. Strain and freeze at once. When mixed together it should not be left standing, as the juice will tend to curdle the cream.

PEACH.

Take 2 quarts of cream, 1 pound of sugar, enough good, ripe peaches, mashed and passed through a sieve, to make one pint of juice, and mixed with a little syrup or fine sugar. This is all stirred together and frozen at once. All fruits which contain acid, being of a tart nature, cannot be left standing after being incorporated with the cream, therefore it is advisable to add the juice when the batch is nearly frozen. A little pink coloring is preferred by some ice-cream makers; this, of course, is only a matter of taste.

ADVERTISING THE SODA FOUNTAIN.

Walter L. Rosenberger, writing in *The Soda Fountain,* calls attention to the advisability of advertising the soda department of a store. Here are some excerpts from pamphlets that Mr. Rosenberger suggests for the purpose:

1. CLEANLINESS AND QUALITY.

You know of the quality of the goods we use at our fountain, and we wish to tell you of the extra care we take for your protection of health. By protecting your health, we gain your confidence; your confidence results in our profits. We use every care to have every piece of glass or china used at our fountain CLEANED ESPECIALLY FOR YOU. That is the reason we wash all our utensils and glasses with hot water and soap. Cold water will not remove grease or germs, and when you see the sparkle of our glasses, and the polish on our spoons, you are insured that everything is done to insure cleanliness.

2. WARM WEATHER AND HEALTH.

The hot weather is upon us, and all health authorities tell you the best thing to do is to keep cool, do not overeat, and take things easy. We are in the position of helping you carry out the suggestion of the Department of Health, for our every effort at the fountain is to keep you cool. We make it so pleasant that you cannot possibly fret, and our ice-cream soda and sundaes are just the thing to quench that thirst and satisfy your appetite, and still do you a world of good.

3. YOU HAVE BEEN AWAY: WE HAVE MISSED YOU.

There is no doubt about our missing you, but you have been missing the fine quality of our soda and ice-cream sundaes which are all prepared especially for you. The clean way in which everything is served and the quality of the fruits and syrups used have resulted in this being the busiest year we have ever experienced at our fountain. Come in and you will agree with us that we have deserved the business.

FOR PREPARING LEMON BEVERAGES.

[From *The Spatula.*]

SODA LEMON.

This may be prepared either from the lemonade syrup or directly from the fruit. The only difference between them is that you cannot shake a lemonade made with any charged water, but must of necessity mix with a spoon. Sugar should never be used for sweetening lemonades made with carbonated water, as it causes it to effervesce and liberate the gas, making the drink flat.

LEMONADE.

This name applies to that class of drinks of which the lemon is the base, and it is not surpassed by any of the more modern drinks, in its power to quench a burning thirst. Of all the fancy soda fountain beverages, none admits of so many variations, or seems so generally popular, as the lemonade in some form.

PLAIN OLD-FASHIONED LEMONADE.

To make a plain old-time lemonade seems an easy task, but I have known men to walk by a dozen fountains to secure a good one properly prepared. The important thing is to correctly sweeten a lemonade, and, for the purpose of accuracy, simple syrup is preferable to sugar.

There is a difference in tastes as to the sweetness of drinks, but the majority of people do not like a drink too sweet. Aim to please the majority, but realize that it is easier to add a little sweetening than to fix a lemonade that is too sweet.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Pricing Prescriptions.—

David H. Gordon contributes to the *Druggists' Circular* the schedule of prescription prices in vogue in the store of Coursey & Munn, Atlanta, Ga. He says: "This system is not without a flaw or exception, but we have followed the policy of marking a prescription 'special price' when not priced according to this chart. In looking over the file of about 20,000 prescriptions we find less than 150 marked 'special.'"

The rules for pricing and the schedule of prices follow:

Price no prescription at a profit of less than 100 per cent unless it be for an original bottle of some specialty or "patent" medicine. Use your best judgment in applying the following rules to the prescription and remember that the party may want to get a copy and compare your price with that of other druggists:

1. When handed a copied prescription from a cutter, allow no rule to influence you in making a price.
2. The moral effect is what we are after.
3. Always impress the customer with the fact that we save them money on prescriptions, because we sell "patents" at reasonable figures.

Liquids.
(Where dose is a teaspoonful)

For 2 ounces or less	$0.25
From ½ oz. to 1 oz.	.35
From 1 oz. to 2 ozs.	.40
From 2 ozs. to 3 ozs.	.50
From 3 ozs. to 4 ozs.	.65
From 6 ozs. to 8 ozs.	.85
From 8 ozs. to 12 ozs.	1.00

Liquids for External Use.

For 1 oz. or less	$0.25
From 1 to 2 ozs.	.35
From 2 to 3 ozs.	.40
From 3 to 4 ozs.	.50
From 4 to 6 ozs.	.65
From 6 to 8 ozs.	.75

Shop Pills.

For 12 or less	$0.25
From 12 to 18	.35
From 18 to 24	.40
From 24 to 36	.50
From 36 to 48	.65

Hypodermic Tablets.
(100 per cent on net invoice price.)

For 3 or less	$0.25
For 4	.35
From 4 to 6	.50
From 6 to 8	.65
From 9 to 12	.75
From 12 to 16	1.00

Powders.

For 6 or less	$0.25
From 6 to 8	.35
From 8 to 12	.40
From 12 to 15	.50
From 15 to 24	.65
From 24 to 30	.75
From 30 to 36	.85
From 36 to 48	1.00
From 48 to 60	1.25

Konseals.

For 4 or less	$0.25
From 4 to 6	.35
From 6 to 8	.40
From 8 to 12	.50
From 12 to 24	.75
From 24 to 36	1.00

Liquids.
(Where dose is two teaspoonfuls.)

For 1 ounce or less	$0.35
From 1 oz. to 2 ozs.	.35
From 2 ozs. to 3 ozs.	.40
From 3 ozs. to 4 ozs.	.50
From 4 ozs. to 6 ozs.	.65
From 8 ozs. to 12 ozs.	.90
From 12 ozs. to 16 ozs.	1.25

Ointments.

For ½ oz. or less	$0.25
From ½ to 1 oz.	.35
From 1 to 2 ozs.	.50
From 2 to 4 ozs.	.75
From 4 to 8 ozs.	1.00

Hand Made Pills.

For 6 or less	$0.25
From 6 to 8	.35
From 8 to 12	.40
From 12 to 24	.65
From 24 to 36	.85

Hypodermic Tablets.
(100 per cent on net invoice price.)

For 1 oz. or less	$0.25
From 1 to 2 ozs.	.35
From 2 to 4 ozs.	.50
From 4 to 8 ozs.	.75
From 8 to 12 ozs.	.85
From 12 to 16 ozs.	1.00

Capsules.

For 8 or less	$0.25
From 8 to 12	.35
From 12 to 15	.40
From 15 to 24	.65
From 24 to 36	.75
From 36 to 48	.90
From 48 to 60	1.00
From 60 to 75	1.25
From 75 to 100	1.50

Bulk Powders.

For 1 oz. or less	$0.25
From 1 to 2 ozs.	.35
From 2 to 4 ozs.	.40
From 4 to 6 ozs.	.50
From 6 to 8 ozs.	.65
From 8 to 16 ozs.	.75

A First-class Prescription Ad.—

J. P. Cannon & Sons, of McKenzie, Tenn., are aggressive advertisers. Here is one of their prescription ads. which they ran in their local paper. It was 4½ by 8 inches in dimensions:

Some Things For You To Think About

When you are sick and call a doctor, you select the doctor that you consider the best in town; then you should choose your druggist with the same care that you choose your doctor.

Get the old idea out of your head that you must take your prescription to the druggist whose name is on the prescription blank. Select your druggist with the same care that you selected your doctor and then send the prescription to him.

When your doctor prescribes certain medicines he expects certain results; to get these results, the druggist who fills your prescription must not merely know how to put a little of this and a little of that together, but must have the knowledge and experience to read the doctor's prescription correctly, and we know how to do both of these.

Cannon's Drug Store has been filling prescriptions EVERY DAY since 1875 (thirty-seven years), and every prescription has been filled by a registered licensed pharmacist.

For the welfare of your family we ask that you bring your prescription to our store and have it filled, and then you will know that it is filled correctly with pure, fresh drugs, and by a registered licensed pharmacist.

——TRADE AT——

J. P. CANNON & SONS

WHERE QUALITY COUNTS

McKENZIE, - TENNESSEE

N. B.—Remember, that it makes no difference what doctor writes your prescription or what druggist's name appears on the blank, we can fill it and fill it correctly.

Mr. Turner Cannon, a member of the firm, informs us that they ran this ad. with good results. Druggists who are looking for a good prescription ad. will find the announcement suggestive.

Getting Business from Vacationists.—

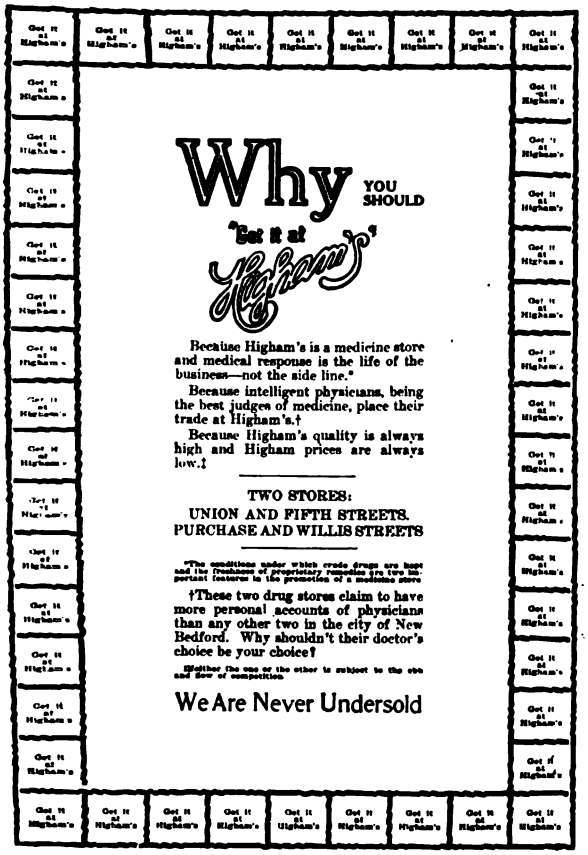
During the summer months there is an exodus of people to the summer resorts and sales are very apt to fall off unless an effort is made to sustain them. Hynson, Westcott & Co., of Baltimore, send a little folder to their customers soliciting business by mail during the summer. It is a very good idea, for city folks are very apt to go away in the hot season.

Information is given for the transmission of orders by telephone, mail, or wire. The folder tells how to obtain refills and describes the various expedients that simplify the purchase of drugs from distant points. A calendar for the summer months is also included. The paper is a somewhat heavy tan stock, the dimensions being 3¼ by 5½ inches. The text is printed in blue surrounded by a gold border.

A "Reason Why" Ad.—

William M. Higham, of New Bedford, Mass., ran a three-column ad. in one of the local dailies. It is reproduced in the accompanying etching, greatly reduced in size. We have been asked to criticize it, but have no particular criticism to offer. We might possibly suggest a different arrangement of the text. The foot-

notes complicate things. Wouldn't it be advisable to run them into the paragraphs to which they belong? People read advertising hurriedly, and will not stop to find foot-notes elucidating the lines they happen to be scanning. Otherwise the ad, is a good one. There is plenty of white space, and the border is conspicuous enough to attract the reader's attention to the ad. "Get it at Higham's" is a good catch phrase to play upon.



A Euthymol Tooth-Paste Window.—

John Von Rohr, of Winona, Minnesota, recently had this display of Euthymol Tooth Paste in his window. The Euthymol Girl was used to good advantage—eight

of her being hung across the top of the window. The dummy cartons of the paste were also employed, and were made into a pleasing design in the center. The tooth-paste itself was spread about on the floor of the window, the tubes being taken out of the cartons in many instances.

Giving Customers the Glad Hand.—

It seems the Commercial Club of Sheldon, Illinois, gave away an $1800 automobile recently. Just what the conditions of the award were we do not know. But the merchants certainly made the most of the occasion to attract people to the town and boom business. Mr. Humma, the druggist, was there to welcome his

friends. He used large bill-board posters, 20 by 28 inches in dimensions, to welcome visitors to his store. A reproduction of the poster is seen in the accompanying etching.

Soliciting Mail Orders.—

It is rather unusual for a retail druggist to distribute a catalogue for the purpose of developing a mail-order business. But several proprietors are doing that successfully. W. J. Frazier, of Wichita, Kansas, sends out a substantial sort of a book to people in the surrounding territory. People are asked to order goods with the understanding that they may be returned if not satisfactory. First-aid supplies, household specialties, and sundries are quoted.

The paper is a heavy white stock, far superior to the cheap kind used by the large mail-order houses. The half-tones are distinct, and last but most important of all, the reading matter describes the material offered in a clear but comprehensive way, giving the reader a good idea of the articles on sale.

Mr. Frazier's catalogue is six by nine inches. The cover is red, bearing in gold letters the title: "Frazier's Handy Home Book," and in justification of this title the book contains much practical information which would cause recipients to preserve it. The whole idea is very commendable and speaks well for the enterprise of the Frazier Drug Co.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Fresh Facts.—

Ferric hydroxide is said to be soluble in white of egg in absence of air, and a new preparation of iron based on this fact is being exploited.

It is now thought very probable that all the elements may exist in allotropic forms. Probably every element has a stable and an unstable form, under definite conditions.

It is calculated that one atom of radium emanation will decompose 154,000 molecules of water.

An Italian chemist says that one of the functions of volatile oils in plants is to increase the flow of sap and make the tissues more permeable to the sap.

Strychnine hinders bacterial ferments in 0.2-per-cent solution, but it requires a 1-per-cent solution to materially hinder the growth of many of the pathogenic germs.

Synthetic rubber has not yet proved a commercial success, but is likely to some day. It will probably not replace natural rubber, but will fill a field of its own.

A German investigator says that it will soon be possible to locate underground water in dry countries by the reflection of electric waves. Telegraphing for it through the earth, so to speak.

"Canadium" is the newest element in point of discovery. It was discovered in British Columbia, and is a white, lustrous metal of the platinum group, softer than platinum.

Mercury salts in solution in water have the property of dissolving considerable quantities of silver chloride, or of preventing the precipitation of silver as chloride.

Cranberries contain benzoic acid, spinach contains arsenic, potatoes contain solanine, cherries contain prussic acid, and peas and beans contain toxalbumins.

Growing plants form starch and sugar by absorption of formaldehyde, but the formaldehyde must be in highly dilute form or it will act as a poison to the plant.

Trimethylamine is said to be a normal constituent of the blood and of the cerebrospinal fluid. And trypsin has been identified as one of the constituents of tears.

Catine, the active principle of catha edulis, has an effect on the nervous system similar to cocaine, and on the heart similar to caffeine. It also posse.ses stimulant effects aside from its heart influence.

External applications of guaiacol—about 10 minims per application—are said to reduce the temperature in typhoid fever.

Ammonium chloride, in 30- to 60-grain doses, is stated to be an antidote to alcoholism, preventing drunkenness, or sobering the individual, and warding off delirium tremens.

Cinnamon water made by distillation from cinnamon bark develops a benzol odor on long standing, according to J. Tait, Ph.C.

By means of liquid helium a temperature of 2° above the absolute zero, or —271° C., has been attained. Probably the absolute zero is impossible of actual attainment.

The New Analysis.—

J. J. Thomson has devised a new method of chemical analysis which is so sensitive that one-six-thousandth of a grain of substance can not only be detected, but its atomic or molecular condition can be determined, and its atomic weight can be ascertained without the necessity of purification. The method consists in exposing the substance to positive rays and to an electric and magnetic focus, then photographing by a special process and studying the lines on the photograph. It is claimed to be more sensitive than the spectroscope.

Modern Farming.—

Gloede has made some interesting experiments on the influence of electricity in the soil on the growth of plants. Wires were run through the ground, carrying currents of high-tension electricity, so that an electric field is created in the soil in which the plants were grown. Chrysanthemums, roses, and carnations grew more rapidly, were freer from plant disease, and produced twice to four times as many blossoms as control plants grown in normal soil. Fruits and vegetables also grew larger, more rapidly, and retained their flavor while producing larger crops. In some instances the flavors were improved.

All Metals Therapeutically Alike.—

Colloidal solutions (or suspensions) of metallic gold, silver, mercury, plantinum, etc., are being tried in medicine, and with some success in infectious diseases. They have been used in pneumonia, meningitis, pleurisy, peritonitis, septicemia, etc., both for local and for constitutional effects. A curious phase of the actions is that all these metals produce about the same effect and in about the same degree, which suggests that the physical properties of the metals are the important thing in medicine.

A Good Mikztrz-Diaztaz.—

A Russian chemist, "Chazakzcz," concludes from fractional precipitation experiments that diastase is a mixed enzyme, and consists of at least two different substances, a liquefying enzyme and a sacchrifying enzyme. He also thinks that the saccharifying enzyme is a complex body, since the different fractions obtained from it differ widely in their properties.

Solvent for Alkaloids.—

Alkaloids are much more soluble in boric-acid-glycerin than in water, and a solvent composed of 3 Gm. boric acid, 50 Gm. glycerin, and water to make 100 Cc. is proposed as a general solvent. The solvent action is increased with proportion of boric acid. Morphine is soluble to the extent of 5.5 per cent in this solution, or 50 times as soluble as in water.

Phosphorus Light.—

A German chemist claims that the human body cannot absorb phosphates, but that these act as irritants and are eliminated. Hypophosphates are partially absorbed, but as a means of supplying phosphorus they are valueless. He says that all the inorganic "nutrient salts" are valueless for building up the body, but may be of use as irritants.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Root Beer Extract.

E. H. L. & Co.—The following preparation makes a root beer "extract" which may be mixed with syrup; or it may be diluted with nine gallons of water containing one gallon of refined molasses, and charged in a fountain:

Fluidextract of sarsaparilla	10 fluidrachms.
Fluidextract of pipsissewa	10 fluidrachms.
Fluidextract of licorice	4 fluidrachms.
Fluidextract of wintergreen	4 fluidrachms.
Oil of wintergreen	48 drops.
Oil of sassafras	24 drops.
Oil of cloves	12 drops.
Alcohol	10 fluidounces.

If it is preferred to use a fermented article, add the water and molasses, using warm water, also one quart of yeast, and keep the mixture in a warm place until fermentation is complete.

This product may be put up in bottles if desired.

Here is a second formula:

Percolate the following with a menstruum of 3 volumes of alcohol to 5 volumes of water until exhausted:

Sassafras	1 ounce.
Yellow dock	1 ounce.
Wild cherry bark	½ ounce.
Allspice	1 ounce.
Wintergreen	1 ounce.
Hops	¼ ounce.
Coriander seed	½ ounce.

To the percolate add 1 pint of yeast and sufficient water to make 6 gallons, and allow to ferment in a warm place. Or a fluidextract of the above can be made of ½ the strength of the drug, and 2 ounces of the extract used for preparing a gallon of beer.

Cottonseed Oil versus Lard.

W. F. G. writes: "Some time ago I read an article on the superiority of cottonseed oil over lard for cooking purposes. I would like very much to receive from some good authority further information regarding the food value of cottonseed oil. If you could publish such an article in your next issue you would greatly oblige me."

In a book entitled "Foods and Their Adulterations," by Dr. H. W. Wiley, we find a paragraph that answers your question in a general way. We quote:

Among the fats which are used for adulterating lard may be mentioned beef fat and cottonseed oil. A mixture of beef fat and cottonseed oil may be made, having approximately the same melting point as lard itself. Instead of using the whole cottonseed oil for the purpose, it may be previously chilled and its product of a higher melting point, or as it is sometimes called, the stearin of cottonseed oil, may be used with admixture of lard. Large quantities of these mixed fats were formerly made in this country under the name of "compound lard" in which the above adulterants were the chief constituents. The laws of the various States are happily of a character which forbids the sale of a mixture of a compound of lard and other fats under the name of lard, *although there is no objection to such admixture from a hygienic and dietetic point of view.* There are many hygienists who are of the opinion that the more extended use of vegetable oils instead of lard would be of value to the health of the public. If this be true, the admixture of a vegetable oil with lard would improve it from a hygienic standpoint. The principal, perhaps the sole, objection to such admixtures is their fraudulent character. Vegetable oils, especially cottonseed oil, being very much cheaper than lard, their use in lard without notification cheapens the product and defrauds the customer.

For more specific information on the food value of cottonseed oil, write the Department of Agriculture, Washington, D. C.

Several Questions.

O. D. asks: "How would you mix benzine and iodine together so that it would make a nice looking solution? Has the solution any special name? What will take silver nitrate stains off of one's hands? What is Boulton's Solution?"

To mix benzine and iodine together, shake them up in a bottle. We do not know the solubility of the metal in this solvent, but you can find out by a little experimenting. We know of no special name that is applied to this solution.

Here is a formula for removing silver nitrate stains from the hands. It is borrowed from "350 Dollar Ideas for Druggists:" Dissolve ½ ounce of potassium cyanide in 2 ounces of water and apply to the stains. With a very little rubbing they will disappear. After applying the solution, the hands should be washed in running water, as potassium cyanide is very poisonous.

Boulton's solution is a mixture of 110 minims of compound solution of iodine, 40 minims of liquefied carbolic acid, 2½ fluidounces of glycerin, and enough water to make 16 fluidounces.

"Banana Oil."

T. W. M. writes: "Will you kindly give me a formula for bronzing liquid, the so-called 'Banana Oil,' and also advise me whether it is used for any other purpose?"

The so-called "banana solution" (the name being derived from its odor), which is used in applying bronzes of various kinds, is usually a mixture of equal parts of amyl acetate and benzine, with just enough pyroxylin dissolved therein to give it sufficient body. Powdered bronze is put into a bottle containing this mixture, and the paint so formed is applied with a brush to the article to be bronzed. The thin covering of pyroxylin that is left after the evaporation of the liquids protects the paint from the air and keeps it from being wiped off by the cleanly housemaid. Tarnished picture frames and tarnished chandeliers to which a gold bronze has been applied from such a solution will look fresh and new for a long time.

As far as we know, banana oil is not used for any other purpose.

What Does He Mean?

"Pharmacist" writes as follows: "Would you please let me know through the columns of your journal what should be dispensed when a prescription for 'C. C. T.—P. D. & Co.' is prescribed?"

"C. C. T." is the customary abbreviation for chocolate-coated tablets, and evidently the prescriber had in mind some particular tablet made by Parke, Davis & Co. He probably intended either to give the number of the tablet or to write out in full the name of it, but forgot to do so in his haste. This explanation, however, is so patent on the surface that we are somewhat at a loss to know why "Pharmacist" puts the question to us.

Sewing Machine Oil.

G. G. G. writes: "Could you publish a formula for an excellent non-gumming sewing machine oil that compares favorably both in quality and price with the standard sort sold in the market?"

Petroleum oils are better adapted for the lubrication of sewing machines than any of the animal oils. Sperm oil has for a long time been considered the standard oil for this purpose, but it is really not well adapted to the conditions to which a sewing machine is subjected. If the machine were operated constantly or regularly every day, probably sperm oil could not be improved on. The difficulty is, however, that a family sewing machine will frequently be allowed to stand untouched for weeks at a time, and will then be expected to run as smoothly as though just oiled. Under this kind of treatment almost any oil other than petroleum oil will become gummy. What is known in the trade as neutral oil, of high viscosity, would probably answer better for this purpose than anything else. A mixture of 1 part petrolatum and 7 parts paraffin oil has also been recommended.

Complying with the Food and Drugs Act.

O. B. submits the following queries:

1. "In order to comply with the Food and Drugs Act, is it necessary to mention on the label whether preparations contain hyoscyamus, nux vomica, and Adrenalin Chloride?

2. "Should a headache powder which is colored with carmine merely to distinguish it from other powders bear a statement to that effect in order to comply with the law?"

To the first question, we answer no. Alcohol, morphine, opium, cocaine, heroin, eucaine, chloroform, cannabis indica, chloral hydrate, acetanilide, and their derivatives are the drugs which must be mentioned. The food and drugs act does not include hyoscyamus, nux vomica, or adrenalin in the list.

The provision governing the use of coloring agents in food does not apply to drugs. There is no prohibition against using an innocuous coloring material in a pharmaceutical preparation. Nor is it required to mention it on the label.

Sulphates Insoluble in Alcohol.

O. D. has been having trouble with a prescription. He writes: "Please let me know what is the trouble with this mixture. I cannot make it up so it will look well:"

Magnesium sulphate	50 grammes.
Tincture of nux vomica	10 Cc.
Oil of peppermint	.06 Cc.
Tincture of gentian compound	200 Cc.

The trouble is due to insolubility of the magnesium sulphate in the large amount of alcohol contained in the tinctures. Sulphates as a class are practically insoluble in alcohol. The doctor should be advised to change his laxative or give it separately. Or enough water should be added to double the original volume. Then twice the original dose must be taken.

Denatured Alcohol in a Shampoo.

H. C. De B.—Yes, it certainly would be harmful to use denatured alcohol in seafoam shampoos. Ordinary commercial denatured alcohol contains methyl alcohol as a denaturant, and methyl alcohol has been found to be toxic even when used in external preparations. It has no place whatever in medicine. It affects the optic nerve unfavorably, and has even caused blindness. It would seem especially unwise to use it in shampoos, for some of the product might accidentally get into the eyes. The New York City Board of Health has recently passed an ordinance forbidding the use of methyl alcohol in medicaments of any kind. We believe there are two or three State laws of this character, and it is our impression also that there is some governmental ruling or regulation, based on the food and drugs act, and declaring that methyl alcohol will be considered illegal when employed in any medicament.

A Deodorant and Disinfectant for Theaters.

C. J. W. writes: "I have a great many calls from the owners of moving picture shows for a solution to be sprayed through the house for a perfume and disinfectant. Can you suggest a formula for the purpose?"

There is no doubt that moving picture show houses are in need of disinfection. A little fresh air might help. But it is evident from your query that primarily you want a deodorizer rather than a disinfectant or perfume. Some of the aromatic oils related to turpentine have a certain amount of germicidal and insecticidal value. They also have a pleasant odor and to a certain extent deodorizing properties. We have in mind the oils obtained in the distillation of pine wood. The Atlantic Turpentine and Refining Co. of New York sell them. Make an emulsion of the oil with saponified rosin somewhat after the process of compound cresol solution, U. S. P. Then it will mix with water. Use a one- or two-per-cent aqueous emulsion for a spray. A perfume may be added if desired.

Pain Expellers.

I. R.—We do not know the composition of the proprietary preparation which you mention. But the following formula is said to be typical of the so-called pain-expellers or pain-dispellers:

Aromatic spirit of ammonia	1 fluidounce.
Compound spirit of ether	1 fluidounce.
Spirit of peppermint	1 fluidounce.
Compound tincture of lavender	1 fluidounce.
Spirit of camphor	1 fluidounce.
Tincture of capsicum	1 fluidounce.
Tincture of opium	1 fluidounce.
Tincture of rhubarb	1 fluidounce.
Alcohol	8 fluidounces.
Water, enough to make	16 fluidounces.

Apply externally for sprains, bruises, sores and rheumatism, and for all other purposes for which liniments are used. Internally pain-expellers are employed for the cure or relief of colic, diarrhea, etc.

As for the right to call the preparation "Pain Expeller," we see no objection to your using that name. We do not think it would be considered misbranding under the food and drug laws. To call it a "Pain Cure" might get you in trouble.

Business Accounting.

E. E. W.—We assume that you already have a system for keeping customers' accounts, and that what you want is a method for keeping track of business records, so as to show your sales, your purchases, your expenses,

your profits, and the like. A system of this kind was described in an address delivered last year by the editor of this journal before the Nebraska Pharmaceutical Association, and printed on page 498 of the BULLETIN OF PHARMACY for December, 1911. Other systems of a similar character were described with some detail in an article published in the BULLETIN for March, 1907. You doubtless have both of these journals in your files, but if not the publisher will be able to furnish them at the customary price of ten cents apiece.

A Bad Mixture.

W. H. B. writes us as follows: "Could you please suggest through your columns a way to mix the following ingredients to make a thick liquid that will not separate:

Mercury,
Nitric acid,
Oil of cedar,
Tincture of cantharides, equal parts.

"The veterinarian said he had tried to compound this formula by dissolving the mercury in the acid and adding the oil and tincture. But the oil would separate, and the mixture was too thin. He says it can be mixed so that it is a thick, even liquid."

We have tried to compound the mixture in various ways to no avail. We have even added other substances, but the result was unsatisfactory. Emulsifying with acacia and enough tragacanth to thicken and using water to form the primary emulsion gives the best result, but we would not commend it.

Polishing Brass.

C. D. Co. wants a formula of a good brass polish that may be used to polish automobile lamps and the like. The *Wiener Seifensieder-Zeitung* publishes the following formulas for brass polishes:

(1) Rub the metal with rottenstone and sweet oil, then rub off with a piece of cotton flannel, and polish with soft leather. A solution of oxalic acid, rubbed over tarnished brass, soon removes the tarnish, rendering the metal bright. The acid must be washed off with water and the brass rubbed with whiting and soft leather.

(2) Three parts of oxalic acid are dissolved in 40 parts of hot water; add 100 parts of powdered pumice stone, 2 parts of oil of turpentine, 12 parts of soft soap, and 12 parts of a fat oil.

(3) Rottenstone, 7 ounces; powdered oxalic acid, 1 ounce. Both are used with a little water.

(4) Rottenstone, made into a paste with sweet oil.

(5) Rottenstone, 4 ounces; oxalic acid, in fine powder, 1 ounce; sweet oil, 1½ ounces; turpentine, enough to make a paste.

Palatable Castor Oil, Red.

C. R. asks how to make palatable castor oil and how to color it red. In a paper read before the New Jersey Pharmaceutical Association some years ago Prof. P. E. Hommell described the various modes of administering castor oil to make it palatable. After considerable experimentation he had found that the following formula yielded a preparation which was about all that could be desired as a palatable and transparent product:

Castor oil.....4 ounces.
Saccharin.....1 grain.
Oil of anise.....8 drops.
Alcohol.....1 drachm.

Dissolve the saccharin in the alcohol by the aid of gentle heat, and add the oil of anise; then agitate this mixture well with the castor oil. To color red use an oil-red soluble obtained from any of the dye houses.

Innumerable other formulas have appeared in the BULLETIN from time to time. See the annual indexes in the December issues.

Sweeping Compounds.

A. L. B.—According to a patent issued in 1905, a sweeping compound is composed of sawdust, silicious material, rosin, oil, and tar. Another patent calls for catechu, 1 part; mineral oil, 8 parts; sawdust, 16 parts; bran, 32 parts; sand, 48 parts; and water containing a small amount of nitrobenzene, 32 parts.

This is offered as a good formula:

Paraffin wax.....1 ounce av.
Paraffin oil.....2 pints.
Salt.....4 ounces av.
Sea sand.....4 pounds.
Sawdust.....5 pounds.
Oil of eucalyptus.....1 fluidounce.

Melt the wax, add the paraffin oil, incorporate the sand, salt, and sawdust, and finally add the oil of eucalyptus.

A Permanent Beef, Iron and Wine.

H. W. writes: "Please publish the formula for a beef, iron and wine that does not precipitate on standing. My formula or the one in the National Formulary throws down sufficient precipitate to make the product turbid."

Beef, iron and wine is likely to precipitate in the cold. And when the precipitate is redissolved by the application of heat, the solution does not become clear again. We can only suggest that the preparation be aged for three or four weeks. Then filter it. If you still have trouble with the solution, chill it and filter in the cold.

Elixir of Iron, Quinine, Strychnine and Pepsin.

R. I. wants a formula for elixir iron, quinine, strychnine and pepsin.

Follow the formula for elixir of iron, quinine and strychnine given on page 25 of the National Formulary, adding scale pepsin to complete the mixture. It is necessary, however, to make one departure from that process. You must first dissolve the pepsin in the elixir before adding the tincture of citrochloride of iron. Use 8 grains of scale pepsin to the fluidounce.

AT THE MISSOURI STATE MEETING.—Dr. and Mrs. Henry M. Whelpley and Mr. and Mrs. Mittelbach will at once be recognized in this picture. It was taken at the 1912 meeting of the Missouri State Pharmaceutical Association. Dr. Whelpley has been permanent secretary of the organization for 20 years, while Mr. Mittelbach has been treasurer since 1896.

An Incompatible Prescription.

R. I. submits the following prescription for our comments:

Protoiodide of mercury.....8 grains.
Potassium iodide .....2 drachms.
Potassium bromide .....3 drachms.

Mix and make capsules.

The querist says: "While we dispensed the prescription, it did not look good to us. The whole mixture turned dark-gray and slightly damp."

There is probably a certain amount of reaction between the mercurous iodide and the potassium iodide, forming mecuric iodide and mercury. The bromide acts similarly.

A Remedy for Seasickness.

G. L. I. writes: "I should like very much to obtain a formula for seasickness. Being located in a harbor town, we have frequent calls for such a remedy."

Chloretone in 5-grain capsules has been recommended. One susceptible to seasickness can take a capsule on embarking, and another on going to bed. This is by way of a preventive. During an attack let the patient take a 5- or a 7-grain capsule of Chloretone. It is said to relieve the trouble speedily.

Syrup of Ginger Ale.

L. A. B. asks us to furnish him with a formula for making a syrup of ginger ale, to be used at a soda fountain like any other flavor such as vanilla or chocolate, etc.

The Spatula Soda Water Guide gives the following formula for ginger-ale syrup:

Ginger ale extract.....4 ounces.
Acid .....1 ounce.
Caramel, very light.
Lemon syrup, to make.....1 gallon.

Dry Fire Extinguishers.

J. H. M.—The following formulas are reprinted from a previous issue of the BULLETIN:

(1) Common salt .....8 parts.
Sodium bicarbonate .....6 parts.
Sodium sulphate .....2 parts.
Calcium chloride .....2 parts.
Sodium silicate .....2 parts.

(2) Common salt .....60 parts.
Sal ammoniac .....60 parts.
Sodium bicarbonate .....80 parts.

(3) Sal ammoniac .....100 parts.
Sodium sulphate .....60 parts.
Sodium bicarbonate .....40 parts.

Wart Remedies.

L. L.—We are not acquainted with a wart remedy of the kind you describe. The safest and best escharotic for the removal of warts is glacial acetic acid applied morning, noon, and night with a camel's-hair pencil. Just touch the wart with the acid: do not saturate. Should soreness result, drop the application for two days, then resume. "Wart Solvent" is aromatic vinegar colored with Bismarck brown. Salicylic collodion is preferred by some, and a formula for it will be found in the National Formulary.

Trade-mark and Serial Number.

O. B. submits the following queries: "Can an individual (not an association or corporation) obtain registration of a trade-mark? Is it necessary that this trade-mark be in use upon articles of commerce prior to time of application for registration? Where shall I write in order to procure a serial number for guaranteeing articles under food and drugs act?"

To the first two queries, our answer is in the affirmative, yes. To procure a serial number write the Secretary of Agriculture, Washington, D. C.

Washing Powders.

A. L. B.—We do not know the composition of the proprietary products which you mention. Perhaps the following formulas will prove satisfactory for a washing powder:

(1) Sodium carbonate .....12 ounces av.
Powdered soap .....2 ounces av.
Powdered borax .....2 ounces av.

(2) Sal soda, partially effervescent.....6 parts.
Soda ash .....1 part.
Yellow soap in coarse powder.....1 part.

Foot Powder.

L. L.—Salicylated powder of talc, N. F., is an excellent foot powder, of the following composition:

Salicylic acid .....1 ounce av.
Boric acid .....3½ ounces av.
Talcum .....29 ounces av.

Reduce all to fine powder, mix well, and pass through a fine sieve.

Salicylated powder with talc of the German Pharmacopœia is like the preceding, but contains wheat starch instead of boric acid.

Face Powder in the Form of a Paste.

W. G. L. wants the formula of a face powder presented in the form of a paste.

Here is a typical formula:

Prepared chalk .....8 ounces.
Flake white .....6 ounces.
Zinc oxide .....1 ounce.
Glycerin .....3 ounces.
Bay rum .....4 ounces.
Carmine solution, sufficient.

A Concentrated Laxative Cough Preparation.

J. W. L.—We do not know the composition of the proprietary cough preparation you mention. But if you want a formula for a concentrated laxative cough remedy, you might try concentrated fluid white pine compound for making the syrup. Add a little fluidextract of senna to make it laxative. The fluid could be diluted with simple syrup.

A Dustless Mop.

H. W. requests us to publish a method of making what he calls a chemical mop.

The so-called dustless mop is made by saturating an ordinary dry mop in petrolatum oil. It is then wrung out to remove the excess oil.

Corn Collodion.

L. L. writes: "Can you give me a formula for an iodine corn cure?"

Suppose you follow the N. F. formula for corn collodion, adding to it tincture of iodine sufficient to impart 3 per cent of metallic iodine to the compound. Try it.

Sambucus Ebulus.

J. S. asks: "What is *Sambucus Ebulus*?"

Sambucus Ebulus is a European elder. It is used as a drastic purgative.

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THE MONTH'S HISTORY

THE PRICE OF GROWTH.

This issue of the BULLETIN is unfortunately a little late. The delay has been caused by our desire to present adequate reviews of the two great conventions of the year—the N. A. R. D. in Milwaukee and the A. Ph. A. in Denver. A staff correspondent attended both meetings, and his summaries appear elsewhere.

In the meantime the various State organizations continue to hold their annual gatherings from week to week, and altogether there has recently been a good deal of association activity. We observe that the question of membership keeps cropping up. Apparently the only way to develop a big membership, and to keep it big, is by means of traveling organizers. Out in Iowa, as we reported last month, the membership of the State Association has been increased from 400 to 1200 through a county organization system, supplemented by the earnest efforts of a paid organizer (a woman, by the way) whose whole time has been devoted to the task for a year or more. Two or three other State associations have practiced the same methods with success.

Such work, however, must apparently be kept up indefatigably. In Ohio, for instance, where the membership had grown in 1911 up to the surprising figure of 1481, interest began to slump as soon as the organizer resigned from his task, and at the recent annual meeting it was found that reports from the county organizations were far too infrequent in number and much too indifferent in character. The last organization campaign cost $1786, and only brought in $1522, but even at that it was to be considered a success since it added greatly to the strength of the body. It appeared from reports read at the N. A. R. D. convention in Milwaukee that organization work is very expensive, and that it costs from 50 to 100 per cent to collect dues! This scarcely seems worth while, and yet we feel perfectly certain that if the N. A. R. D. organizers or dues-solicitors were to be removed from duty the membership would slump alarmingly. Even as it is, it has gone down during the last four years from 16,519 to 7967. The continued work of paid organizers, both for the N. A. R. D. and for the State associations, seems essential and necessary if anything like a representative membership is to be secured and held.

Unless an association has a really representative membership, it largely loses the influence and force which it needs especially in legislative matters, and efforts to keep up growth and increase are therefore worth all they cost.

* * *

LEGISLATIVE QUESTIONS.

Legislative matters have occupied a conspicuous place in the foreground at most of the recent meetings, State and National. Elsewhere in the present issue of the BULLETIN

we are printing the address of John C. Wallace, delivered at the Denver meeting last month as chairman of the Section on Education and Legislation of the A. Ph. A. Among other things, Mr. Wallace expresses the opinion that there should be a national law providing for the keeping of records of sales of narcotics sent into interstate commerce. This has been a moot question now for a couple of years or so. Such a provision has been introduced in two or three congressional measures, and now appears, we believe, in one of the group of Harrison bills recently introduced into Congress.

We disagree with Mr. Wallace absolutely. We have often expressed the opinion editorially that to keep records of such sales would involve an enormous and entirely needless amount of inconvenience, and we are glad to see at last that the N. A. R. D. agrees with us. The N. A. R. D. Committee on Legislation, in its report rendered at the Milwaukee convention last month, declared against the record feature of any national law. As a matter of fact, very few people realize what this will mean. There are literally thousands and thousands of pills, tablets, and other products of which records would have to be kept. Every manufacturer and jobber would require a staff of extra clerks for the purpose, and the department in Washington would require an army of them. The expense on the government alone would be very great, and all this work would be done for the State governments, since it is proposed to have the facts covered every month to State officials in order to provide them with means of enforcing the State laws.

Is there any necessity for subjecting manufacturers, jobbers, and even retailers to such a gigantic amount of annoyance, inconvenience, and trouble of a thousand kinds? Is any government department going to welcome so much extra work? Will the Federal government subject itself to all this expense and detail merely to help the State governments do their work? More than all this, will the game be worth the candle? Is it going to be of any substantial help in the enforcement of anti-narcotic laws—in the curtailment and correction of the narcotic evil? We certainly do not think so, and we believe the whole proposition is foolish from start to finish.

THE "SINGLE STANDARD."

We find Mr. Wallace also expressing himself in favor of what he calls "the single standard" for U. S. P. and N. F. products. He gives a list of a few States which impose the single standard, and of others which have differing requirements. We disagree with Mr. Wallace in this respect also. We have often argued that the so-called "variation clause" in the Federal act is both wise and necessary, and is furthermore essential to the constitutionality of the law. If we do not permit changes and improvements to be made in official products, we are going to hold back all progress until a new edition of the U. S. P. happens to be published.

It is sometimes argued, however, that the variation clause permits the sale of preparations of inferior strength. The reply to this is that the clause provides that the actual strength must be stated on the label. Is not the buyer therefore protected? In some States, as Mr. Wallace points out, the variation clause in the Federal act has been duplicated except that sub-standard preparations may not be sold, like opium products or certain flavoring essences used generally by the public. These are wise concessions, but if the variation clause as a whole is thrown overboard, either in national or State legislation, much harm will be done to the advancement of scientific medicine, and the constitutionality of such legislation will be imperiled.

As a matter of fact, however, this whole argument is now more or less beside the question. It was argued very strenuously all winter with reference to the Richardson bill, which certainly stirred up a lot of strife and dispute. The Richardson bill, though, has been sidetracked by the Committee on Interstate Commerce in the House of Representatives, and we shall not hear of it again until next year if we do then. Much was said about this bill in the report last month of the N. A. R. D. Committee on Legislation, but the bill had not then been killed as it was shortly afterwards. The Richardson measure tried to do too much. It started out originally to bring false therapeutic claims within the scope of the Federal act, but it went much farther and attempted a lot of reforms concerning which no two people or interests could find agreement. It originally proposed to strike out the variation clause

in the food and drugs act, and it also proposed many other changes—but this is now ancient history. We shall have to forget it.

* * *

THE SHERLEY BILL PASSED.

Congress, indeed, has done exactly what we predicted several months ago it would do. It has passed the Sherley bill as a substitute for the Richardson measure and the numerous brood of affiliated drafts. What is the Sherley bill? It is a very simple measure, merely adding a few words to Section 8 of the food and drugs act, and so amending it that hereafter an article shall be deemed to be misbranded "if its package or label shall bear any statement, design, or device regarding the curative or therapeutic effect of such article which is false and fraudulent." This is now a part of the law.

The purpose of this amendment is perfectly clear. When the Johnson Cancer Cure case was decided by the Supreme Court, it was suddenly discovered that the misbranding clause of the food and drugs act did not cover the question of curative claims. The act was held to touch only on statements regarding the purity and identity of the *ingredients* of an article. Hundreds of prosecutions therefore had to stop in which the government was trying to outlaw various "cures" and other remedies concerning which exaggerated therapeutic claims had been made. This omission is now corrected by the Sherley amendment. For the first time the act unquestionably penalizes curative claims which are both false and fraudulent in character.

As we have said, this is what the Richardson bill originally sought to do. It was the decision in the Johnson case which started all this agitation for further amendments of the act—and the agitation is now crystallized in the passage of the Sherley measure. Nothing else was attempted by Congress during the recent session.

* * *

WHO SHOULD ENFORCE THE LAWS?

One of the interesting features of Mr. Wallace's address, to which we have made several references in the foregoing paragraphs, is that in which he shows to whom in the several States the enforcement of the various pure drug acts is entrusted. Mr. Wallace himself believes, and here we agree with him perfectly, that all pharmacy and pure drug laws should be enforced by representatives of pharmacy. Unfortunately, however, while all pharmacy acts are so enforced, only a few of the pure drug laws come in the same category. It will be seen by consulting Mr. Wallace's address that the enforcement of the various laws has been placed in the hands of all sorts of State officials, commissions, and special bodies. Something like uniformity ought to be wrought out of all this chaos.

We are very much pleased to find that at the meeting of the Ohio State Association in July, S. E. Strode, the Dairy and Food Commissioner of that State, put himself vigorously on record by recommending that drugs be separated from foods in the administration of the State food and drug law, and that the former be placed in the hands of a special drug commission. Mr. Strode's position apparently seemed to be, although he did not say so definitely, that such an office as his was scarcely qualified to handle the enforcement of a pure drug law, that it should limit itself to the administration of food and dairy measures, and that drug legislation should be enforced by experts who know the subject thoroughly. Should such a separation be made, he thought it would also solve the problem of the enforcement of the poison laws, and make the whole administration of drug and pharmacy legislation more efficient.

If other officials throughout the country should take so frank and outspoken a position as Mr. Strode, it would help to place the administration of pure drug laws where they belong—either in the hands of the board of pharmacy or, perhaps better yet, a special drug commission or other body in which pharmacists were properly represented.

* * *

SOME RADICAL VIEWS.

While speaking of the Ohio Pharmaceutical Association, we may confess to a good deal of interest in the presidential address of Azor Thurston. This officer evidently has ideas of his own about a whole lot of things. He thought, for instance, that the practice of receiving reports from druggists' insurance companies, and then giving them valuable space afterwards in the proceedings, was indefensible. These companies, he said, repre-

sented private enterprise, should not be given free advertising, and should be made to pay for what space they occupied in the proceedings. President Thurston also took a fall out of the practice of paying the expenses of delegates to N. A. R. D. meetings. Why not pay those men also who go to the A. Ph. A. convention, the American Chemical Society, or to the various State gatherings? Why this discrimination? To his way of thinking it was a "most uncalled for expenditure."

Mr. Thurston paid his respects to physicians. He thought the State drug inspectors should have authority to examine the stocks of dispensing doctors as they do those in drug stores, and that the law should make it compulsory to have registered pharmacists in charge of such dispensaries.

* * *

THE VENEREAL QUESTION.

An interesting feature of the Ohio State meeting was the delivery of an address by Julius M. Rogoff, Ph.G., M.D. It will be seen from Dr. Rogoff's degrees that he is a graduate pharmacist as well as a graduate physician. By reason of his dual training and interest he was asked to read a paper on medico-pharmaceutical ethics. He went over the whole field of differences between the two callings, and what he said on one subject we feel moved to quote:

> A most dishonest practice among druggists is the treatment of venereal diseases. These diseases have resisted the combat against them for ages, and are still partly unconquered by the most recent valuable developments in medical progress; these dreaded venereal diseases, which are the curse of society, we find druggists are dishonest enough to attempt to treat, and, I must say, with disastrous results. I may mention in connection with this topic the fact that a supposedly ethical manufacturing pharmaceutical firm is guilty of this malpractice by placing in their line which they furnish to druggists a preparation for treating these venereal diseases, for indeed, I have seen as many cases of venereal complications resulting from the use of their combination as I have from any other misguided treatment.

There is no doubt at all that Dr. Rogoff is entirely right and sound. We have often expressed our opinion that no druggist should either make or sell any venereal remedy except on the prescription of a physician. Whatever may be thought about counter-prescribing in its general aspects, there is no room for difference of opinion under this head.

"NO FINANCIAL EXPECTORATION!"

We wonder if our pharmaceutical friends in Greater New York will see the humor in Herr Bodemann's report for the Committee on Telephones read at the Milwaukee convention of the N. A. R. D. last month? He described the telephone imbroglio of last winter in New York City, intimated that the final compromise was unsatisfactory from the druggist's point of view, and thought that the failure was easily traceable to the fact that "a trade not well organized can make no bargain, nor give promises, nor hold out inducements for promises." "New York City," he said, "had about 58 varieties of races and nationalities, who had not smelted into a typical American citizenship, with the flag 'in union there is strength' nailed to the topmast of the ship."

Mr. Bodemann thought, indeed, that "Greater New York was the smallest village in the country when it came to a solidly cemented drug trade." He remarked that when 2400 postal cards were sent out calling for a small assessment, only $14 was secured. The postal cards themselves cost $24, and so the committee was out $10 instead of being in anything! He thought this effort to make the druggists of Greater New York "cough up" indicated the pitiable plight which they were in. "The cough was a dry bronchitis, with no financial expectoration!"

* * *

ANOTHER NEWSPAPER CRUSADE.

It would appear from the newspapers that H. A. Metz & Co. and Victor Koechl & Co. have started war on druggists throughout the country who are buying contraband synthetics. Two of the products specifically mentioned in the newspaper articles are Salvarsan and Aristol. For several days in succession the New York papers had column stories on the subject, in which the statement was frequently made that druggists were little else than substitutors and adulterators. Over 500 druggists were claimed to have been "discovered," and it was stated in some of the reports that more than 100 druggists on the east side of New York alone had been caught. In Chicago it was said that out of 123 samples of Aristol purchased in different drug stores 108 were found to be substitutes. The druggists in Brooklyn particularly have resented these newspaper articles, and have declared that

pharmacists often did not know they were buying contraband or adulterated products. One of the interesting features of the investigation was the discovery of a place in Brooklyn, over a livery stable, where sophisticated synthetics were prepared, or at least where they were kept in stock for the filling of orders. The packages, however, were such close imitations that it was almost impossible to tell them from the legitimate ones.

* * *

ANOTHER NEW DEAN.

T. Bernard Tanner, P. D., has been elected to succeed Dr. N. A. Dubois as dean of the Cleveland School of Pharmacy, and has already made several changes in the curriculum. An alumnus of the Philadelphia College of Pharmacy, class of 1911, he served on the Faculty of the Cleveland School last year as Professor of Theoretical and Applied Pharmacy. Since his promotion to the deanship on June 1, he has changed the entire curriculum of the college, established a course in dispensing, one in pharmaceutical jurisprudence, and a series of special lectures in emergencies and hygiene. Prior to his graduation from the Philadelphia College, Professor Tanner spent twelve years in the retail drug business, so that he presumably knows conditions as they actually exist behind the counter. In addition to his deanship in Cleveland, he is secretary of the Northern Ohio Branch of the A. Ph. A., and secretary also of the Medico-Pharmaceutical Section of the Academy of Medicine.

T. Bernard Tanner.

* * *

MICHIGAN ASSOCIATIONS UNITE.

The two State associations in Michigan amalgamated last month at a joint meeting held in Muskegon. The new organization is to have the name of the older of the two preëxisting bodies—the Michigan State Pharmaceutical Association. Otherwise, however, the constitution, by-laws, and characteristics of the new organization will be more like the Michigan Retail Druggists' Association, which was formed in the western part of the State three or four years ago primarily for legislative purposes.

Among other things, the M. S. P. A. will now have a membership exclusively limited to men engaged in the retail branch of the trade, although special provision is made for making honorary members of teachers and the like. The chief object of the association will be to look out for the legislative interests of the retail druggists of the State, and it plans to have the annual gatherings more practical in nature and more devoted to every-day business problems. Many differences of opinion between the two former associations were exhibited at the Muskegon convention, but everything finally came out harmoniously, and it looks now as if the drug trade of the State would be united once more.

The officers of the new organization are as follows: President—Henry Riechel, of Grand Rapids; Vice-Presidents—F. E. Thatcher of Ravenna, and E. E. Miller of Traverse City; Secretary—Von W. Furniss, of Nashville; Treasurer—E. C. Varnum, of Jonesville.

* * *

MR. WELLER'S MARRIAGE.

C. F. Weller, president of the Richardson Drug Co., Omaha, Nebraska, has been married to Mrs. Jennie A. Whittlesey, of Hartford, Conn., the ceremony taking place at the Grand Hotel in Council Bluffs. The wedding completed a romance which began on an Atlantic liner, and was nurtured in France, Germany, Italy, Egypt, India, and Japan. Mr. Weller first met his bride when she joined a party for a round-the-world tour some months ago. They were mutually attracted, and the wedding followed in due season.

EDITORIAL

THE STATE BOARDS GETTING TOGETHER.

Our State system of registration in pharmacy—and in all the other regulated professions for that matter—has occasioned a good deal of incidental inconvenience in this country. From the very first a demand has occasionally expressed itself that in some way a pharmacist who had gained registration in one State, and had been legally given the right to practice his profession, should automatically be considered registered in all other States, and should have the same right in them as in his own.

Nothing practical, however, was ever done to bring about the realization of such a dream until the National Association of Boards of Pharmacy was organized twelve or thirteen years ago in connection with the A. Ph. A. This organization has gradually grown and developed until now a majority of the State boards of pharmacy are exchanging certificates with one another under certain stipulated rulings. In some cases, however, as in New York and Pennsylvania, where the graduation prerequisite obtains, the certificates of other States cannot be accepted because they do not represent the attainment of the same standard. In other cases, too, the State pharmacy acts are of such a character as to prohibit reciprocity. Gradually, though, these differences are being brushed away, although it will always be true, and very properly so, that a State requiring graduation from a college of pharmacy cannot accept registration from other States not insisting upon this requirement.

An interesting and important result of the organization of the National Association of Boards is seen in the formation of what might be called local associations in different parts of the country. Thus in New England, for instance, the boards of pharmacy of the different States have created an organization of their own which meets regularly and which is properly officered. There is a similar group of southern boards, and another group in the middle west and northwest known as the Interstate Association of Boards of Pharmacy. Each of these sectional associations involves the membership of six or eight State boards. Meetings are held first in one State, then in another, the different boards alternating as hosts, and a time is selected when the local board is itself holding an examination. The visitors attend the examination itself, see how the work is done, confer together over details, and afterwards have a profitable experience meeting in which the whole subject in all of its ramifications is very carefully and earnestly discussed.

The primary purpose of this movement, national and sectional, is first to bring about uniform examinations and uniform conditions of legislation so far as possible, and then of course to agree upon a system of reciprocal interchange of certificates. For reciprocity, if based upon anything else than a reasonable degree of uniformity, would be a farce and would do more harm than good. Incidentally, however, these frequent meetings between the different boards of pharmacy of the country, and their attendance upon one another's examinations, is admirable for its own sake, entirely apart from the question of reciprocity. Board members are becoming better equipped for their work; they are making a study of the science of examining; they are profiting by the experience of their fellows; they are learning to attack problems with earnestness and coöperation; and the final result is that year by year our State examinations in pharmacy are gradually improving, are slowly becoming better tests of real efficiency, and are silently responding to the demand for an evolutionary elevation in the requirements imposed upon candidates.

In Denver last month the National Association of Boards held a meeting of characteristic interest and importance, and testified once more to its marked usefulness. May the good work go on!

"INTERNATIONAL COOPERATION IN PHARMACY."

An interesting address having the foregoing title was presented to the Denver meeting of the A. Ph. A. last month by J. J. Hofman, Secretary of the "Fédération International Pharmaceutique." It was sent upon invitation, and it was really an explanation of the International Fédération. Mr. Hofman declared that the object of the Fédération was the promotion of pharmacy both as a profession and as an applied science, along international channels, and he explained that the Fédération will endeavor to attain this object by:

1. Collecting data with regard to the pharmaceutical

profession in all countries, and by supplying information on scientific and practical pharmacy.

2. By promoting uniformity in the qualifications required for education and tuition.

3. By studying the laws regulating the pharmaceutical profession.

4. By giving advice and supplying data with regard to the laws relating to pharmacy.

5. By organizing international pharmaceutical congresses.

6. By filing the papers of these international congresses, arranging and working out the subjects treated there, and studying fresh subjects for treatment.

7. By making arrangements for taking part in congresses of interest to pharmacy and by collaboration with other international societies.

8. By protecting the rights of the pharmaceutical profession.

9. By opposing the sale of secret remedies and the practicing of pharmacy and sale of medicines by unqualified persons.

10. By promoting the prosperity of the national pharmaceutical societies.

11. By promoting uniformity in the form of medicines and methods of analysis.

12. By promoting international harmony regulating the drug trade.

13. By exercising its influence in the event of an international regulation of patents, brands, and trademarks.

14. By the publication of papers on subjects of interest to international pharmaceutics.

15. By doing all other things which are conducive to the attainment of the object of the Fédération.

Certainly this is an interesting programme to be worked out in the future in the interests of international comity. Mr. Hofman is correct in saying that its realization will be of great service to pharmacy throughout the world. Modern transportation, modern diplomacy, and modern means of a thousand kinds of bringing the world closer together have resulted in an ever-increasing coöperation between nations. This is seen in movements affecting every trade, industry, and interest. The formation of the Fédération International Pharmaceutique is merely a part of this world-wide movement, and the work of the organization should receive general support.

OUR EXAMPLE IN CULTIVATING MEDICINAL PLANTS.

The presidential address of Sir Edward Evans to the British Pharmaceutical Conference, held in Edinburgh a few weeks ago, is of peculiar interest to Americans. Sir Edward had been in the United States not many months before, together with his son, and he had been struck with the extent to which our government was experimenting with and fostering the cultivation of medicinal plants. Almost his entire address was devoted to this subject, and he believed that the British government should undertake similar work. A bureau or department like that existing in Washington might be created in the Board of Agriculture, while in the British colonies were all sorts of soils and climates favorable to drug cultivation. Special reference was made to such drugs as cascara, mandrake root, hydrastis, ginseng, bayberry, hamamelis, and senega.

Sir Edward's son, J. H. E. Evans, read a paper in which he developed the theme in detail. He believed that "within our own colonies we should be able to cultivate much of our vegetable materia medica." He thought the attention of the government should be drawn to the possibilities as being of benefit to the public generally, and also as a means of working lands and employing labor which are now unproductive.

The following are a few drugs which are cultivated more or less successfully at present: Calumba, in Ceylon; eucalyptus and patchouli, in the tropics; belladonna, in England, France, and America; coca, in the West Indies, Ceylon, and Zanzibar; kola nut, in the tropics generally; cinnamon, in Ceylon; ginger, in Japan; turmeric, in the tropics; ipecacuanha, in India and, to some extent, in Brazil; valerian in England, Germany, and Austria; manna, in Sicily; benzoin, in the Straits Settlements; opium, in the East; and many plants, such as peppermint, lavender, etc., in England. The results which have been achieved in agriculture and horticulture in a comparatively short space of time would lead one to suppose that if the same skill and work were put into the cultivation of other drugs similar benefits would follow.

As the British Empire possesses every variety of climate and situation, it is probable, said Mr. Evans, that the majority of useful substances in the materia medica could be produced within its limits. Spread out in various widely separated localities, the risk of shortage of supply which might result from natural causes would be greatly lessened. We have found in America that the artificial cultivation of medicinal plants has become an imperative necessity for the future, and it is interesting to see that our example is likely to be followed abroad.

Some of the A. Ph. A. Members at the Denver Meeting Last Month.

Some of the N. A. R. D. Members at the Milwaukee Convention.

MILWAUKEE MEETING OF THE N. A. R. D.

Price Protection, Propaganda, and Legislation are Prominent Issues—The Coupon Plan Indorsed—Beal Recommended as Wiley's Successor—The Association to Frame an Interstate Antinarcotic Law—The Telephone Question Considered—Freericks Presented with a Silver Service—Henry W. Merritt Elected President.

The fourteenth annual convention of the N. A. R. D. was held this year in Milwaukee. The delegates convened in the Plankinton Auditorium, a magnificent structure costing something like a half-million dollars. Given this splendid hall in which to hold the meetings, and treated on all sides with a hospitality characteristic of Milwaukee, everybody came away more than pleased with the experience.

PRICE PROTECTION PROGRESSING.

Chairman Charles H. Huhn of the Executive Committee recommended the adoption of a detailed price protection plan, the Freericks-Boehm plan, by which patent medicines would be sold at uniform prices and profits.

J. Arthur Bean, an executive committeeman in Bos-

The Milwaukee Auditorium—the handsome building where the convention was held.

ton, covered himself with glory by the way he conducted negotiations for the association with C. I. Hood & Co. of Lowell, Mass. Hood's Sarsaparilla, as a result of Mr. Bean's solicitation, will, beginning Sept. 1, be sold at $8.00 a dozen instead of $8.75, as heretofore. Mr. Potts remarked that this concession only goes to show that all the manufacturers must sooner or later fall into line and sell their goods on a 2, 4, and 8 basis. A resolution signed by Delegates Bean, Nixon, and Finneran was then offered to the convention as follows:

Whereas, C. I. Hood & Co., of Lowell, Mass., has seen the wisdom of conforming to the 2, 4 and 8 plan advocated by the N. A. R. D., therefore be it

Resolved, that the thanks of this association be tendered to C. I. Hood & Co. for adopting this plan, and be it further

Resolved, That we request the retail drug trade to recognize and appreciate what this firm has done in furthering similar action on the part of those firms who are still marketing overpriced preparations.

Resolved, That our Secretary be authorized to send them a copy of these resolutions.

Progress is unquestionably being made in price protection. Frank H. Freericks, special counsel for the association, has a plan whereby the manufacturers will be required to enter into an agreement with a distributing agent or wholesaler in each city where his product is sold. The latter will be required to produce a cash bond, the amount depending on the volume of business, to insure that he will act in good faith. He will also appoint sub-agents in large cities who will be responsible to him. The distributor will assume responsibility for the sale of medicine of the concern for which he is acting, and will be held accountable for all sales made at other than the authorized price. The manufacturer on his part will be asked to agree to deliver the product to none but the accredited agent.

Retiring President Shuptrine gave it as his opinion that the association now has a feasible price protection plan, one by which druggists of the country can derive a living profit on the sale of patent medicines. He advised every druggist to get a copy of the Freericks-Boehm plan and study it carefully. As we see it, continued Mr. Shuptrine, we are in accord with the law. The members of the Executive Committee, too, are agreed that Mr. Freericks has framed for the N. A. R. D. a legal-proof price protection plan. They recommend it as one involving as little detail as possible for carrying out the necessary provisions, and as a plan which they believe will legally price-protect the sale of proprietaries.

President-elect Henry W. Merritt, in his speech of acceptance, said he was in favor of price protection on a 2, 4 and 8 basis. He expressed his appreciation for the efforts of Miles and other firms who have been loyal to the retail trade. The manufacturer of an unprotected and overpriced product he did not consider a friend of the association.

AN INTERSTATE ANTI-NARCOTIC BILL.

Annoyed by the vain attempts on the part of lawyers and statesmen to draft an interstate anti-narcotic bill that is effective, but at the same time practicable, the N. A. R. D. decided to take this duty into its own hands and frame a proper bill. Mr. Hubbard of Boston felt, however, that it was a mistake for the druggist to usurp this function. He thought law-making might better be left to legislators who specialize in this work, notwithstanding the fact that Chairman Richardson of the N. A. R. D. legislative committee had recommended that the association draft an anti-narcotic law because he believed it had men who could do it. But Mr. Hubbard, who, by the way, represented the A. Ph. A. at the hearings in Washington last April, felt that legislation was dangerous ground to walk on. He felt, too, that druggists were not wise in pressing upon the government the adoption of measures that might militate against themselves.

Several speakers dissented from what Mr. Hubbard had said. Mr. Nixon differed from his colleague from Massachusetts. He pointed out that druggists were not

initiating new legislation in framing an interstate anti-narcotic law, because there are already two bills in Congress, the Harrison and the Wright bills, for controlling the sale of narcotics. Let us have a committee of five draft a reasonable bill, said Mr. Nixon, rather than have some one else draft an unreasonable one.

Charles M. Woodruff, who attended the convention as a representative of the National Association of

Group picture of the Ohio delegation, on the steps of the Auditorium building.

Manufacturers of Medicinal Products, then took the floor. "There are certain conditions to be met," he said. "Some druggists fought the Foster bill not because they opposed its purpose but because they thought another bill would accomplish the same purpose without doing so much injustice. The Foster bill is now revived in the Harrison bill, and you do not want the Harrison bill!" Mr. Woodruff went on to say:

> Practical nullification of State laws by the regulations of interstate commerce is to be avoided. Hamilton Wright seems bound to pass a cocaine law to his liking, regardless of what the drug trade thinks of it. His bill has a good aim, but to subject a wholesaler or a manufacturer to a risk of a thousand or five thousand dollar fine for the technical error of a shipping clerk is wrong. We have drawn up a tentative bill that subjects neither wholesaler, retailer nor manufacturer to a fine.

Mr. Woodruff then went into details of the plan. This will be adopted instead of the Harrison bill if all concerned can get together on it. Mr. Woodruff concluded by supporting the appointment of a committee to draft an anti-narcotic law.

Mr. Woodruff's assertion that the association did not want the Harrison bill was later borne out by a report of the resolutions committee condemning the Harrison bill as impossible because it involved much useless red tape.

Following Mr. Woodruff, Mr. Shuptrine arose, maintaining that there was no body of men better fitted to draft laws bearing on the retail drug business than the retail druggists themselves. Mr. Meissner, too, argued it were better to be aggressive now, and ourselves formulate an anti-narcotic bill, rather than later have the necessity of fighting an unsatisfactory one made by others.

At this juncture, several arose to correct any misconstruction that might be made of Mr. Hubbard's argument. Mr. Anderson pointed out that it would be unwise for the druggist to surround himself with any more laws than were necessary. And Mr. Finneran of Boston also arose to pay tribute to Mr. Hubbard. He said: "In Massachusetts we have the best cocaine law in the United States, and Mr. Hubbard is responsible for it. We have as good an anti-narcotic law as any, and Mr. Hubbard is responsible for it." Then Mr. Finneran proceeded to call attention to a point which he had never seen discussed in any of the pharmaceutical journals, namely, that representatives of the United States had gone to The Hague opium conference and had agreed to abide by its conclusions. Article 10, Section 3, offers a rule which it plainly states shall not apply to medicinal prescriptions and retail pharmacists. But notwithstanding this preamble, Hamilton Wright comes forth and desires to frame an anti-narcotic law to suit himself.

Mr. Wallace then took the floor. "For five consecutive years, a congressional anti-narcotic bill has been proposed and killed. Finally, druggists were told, if these bills are not satisfactory, why don't you frame a bill that suits all concerned?" Mr. Wallace urged the association to draft a bill that will provide a record of narcotic sales. Mr. Pfluck supported this position by declaring that unless narcotics can be traced from State to State, the evil will continue as ever.

It seemed to be the general opinion of the audience that it were better for the N. A. R. D. to draft its own anti-narcotic law. The association felt that the effective pharmacy laws are those that the druggists have themselves prepared. After much more discussion by several speakers, it was finally resolved, therefore, that,

> *Whereas*, the Legislative Committee recommends the appointment of a special committee of five to draft a national anti-narcotic bill, and
>
> *Whereas*, several anti-narcotic bills have from time to time been introduced and are being considered by Congress, which bills are impracticable or decidedly onerous to the retail druggists without effecting the objects desired, therefore
>
> *Resolved*, that the recommendation of the legislative committee be approved and the committee appointed to draft such a bill, such draft to be given the widest publicity and presented at the next annual convention of the Association for final approval unless conditions require earlier action, in which case it should first have the approval of our legislative committee.

THE PROPAGANDA WORK.

H. J. Holthoefer of Chicago scored the members of the association for their apathy toward the propa-

The Illinois delegation.

ganda movement. He said: "You have many words for price protection, telephone adjustments, and other things, but for propaganda work you have only apathy. Apathy! apathy! apathy! That is all we get!

"Why, I heard of one doctor prescribing magma magnesiæ, only to have the druggist call him up and ask what it was, adding that he had looked in all his price lists without finding the preparation!"

This stirred up the convention, and one after another the members took the floor. Mr. Rieburg of Wisconsin suggested that if a special man be employed to call on the doctors in the interests of the druggists, the latter should first agree on what preparations are to be fostered. Then the detail man can go ahead. In several Wisconsin cities the druggists have contributed $10.00 each for this propaganda work. It brings us back, he said, to the good old-time compounding, and that is what we want.

Mr. Sieberz of Louisville, a member of the propaganda committee, deemed it advisable to lecture the medical students on U. S. P. and N. F. products, an idea that was recommended also by Dr. Anderson. Dr. Anderson took occasion to criticize the superficial courses in pharmacy offered in some medical colleges, saying it were better to supplant such study with a good grounding in incompatibilities, so that the physician upon graduating would be competent to write prescriptions. Many men dispense out of an inability to prescribe.

"Propaganda," continued Dr. Anderson, "was started to restore us to old conditions, to put us back behind the counter where we use our mortars and pestles and not merely be pourers of liquid from bottle to bottle! Tell the doctor that in the Pharmacopœia are all the drugs he needs. Let him prescribe them. Then let the pharmacist dispense the prescriptions and practice his profession. Physicians can't expect us to give up side-lines so long as they fail to write ethical prescriptions."

Dr. J. Wise of Atlanta told of the good accomplished by get-together meetings. In that city the druggists gave a "D" dinner—a dollar dinner to doctors, dentists, and druggists. "We gave them a cocktail to begin with," said Mr. Wise humorously, "later following with

Some of the Southern members, wiih retiring President Shuptrine in the center.

an orange elixir and winding up with a curacao cordial, so that everybody went home feeling good."

Speaking of the get-together meetings in Savannah, Mr. Shuptrine said they were started by the doctors themselves. Druggists were guests of the physicians at one of their monthly meetings. "We went after them," said Mr. Shuptrine. "We called a spade a spade. For 2½ hours after the dinner we sat around talking things over. Then we reciprocated by giving a dinner to the doctors, which acted as a salve to heal the wounds left by the first meeting. We arranged with the wholesale houses to prepare samples of a few N. F. preparations each month and distributed them among the physicians. The results were miraculous. To-day we have the physicians eating out of our hands. Conditions are most happy. When a doctor now prescribes one of those astounding proprietaries, he calls us up by 'phone to apologize."

After some remarks by several more speakers, Mr. Bruder took the floor to urge upon the members

Reading from the left, this delegation from Detroit comprises Grant W. Stevens, Mrs. J. H. Webster, Charles F. Mann, Miss Mann, Mrs. Mann, J. H. Webster and James W. Seeley.

of the association the need of raising money for the propaganda movement. "Go back home," he said, "and assess each druggist 10 or 15 dollars and go after the propaganda work. All the money you put into this project will come back to you many times over."

SHERMAN ANTI-TRUST LAW.

President Shuptrine maintained that the Sherman anti-trust act was losing ground. Its hardship to legitimate retail interests is being realized more and more, and the time is not far off, said Mr. Shuptrine, when it will be amended so as to meet all the just demands of the retailer and at the same time not detract appreciably from its power to check the large interests it was originally intended to control. It will be changed to meet the demands of all that is honest and legitimate.

Mr. Freericks pointed out in the legislative conference that we have to-day in industry two factions, the larger interests and the smaller interests. The larger interests could never effect a change in the Sherman act because it would be assumed that they were looking for something more than they were already getting. For this reason in the Clapp bill, drawn up by Mr. Freericks himself, and recently introduced in the senate, the farmer, the laborer, and the smaller manufacturers and retailers were all considered. But it was felt that class legislation would not be constitutional; so a Federal incorporation feature was inserted in the bill which would control all corporations, but which would permit corporations not for profit, but for common interests and common welfare, to get together under governmental supervision. This makes possible the segregation of the smaller from the larger interests, and permits the former to organize under the law.

The next step, continued Mr. Freericks, is to differentiate between restraint of trade and a restraint of reasonable competition which hurts all interests. By the Freericks-Clapp bill retail dealers may enter into

an agreement whereby competition is reasonably restrained, and they may agree on prices provided there be no attempt to seek injury of one as against another. The aim is to prevent ruinous competition and allow all to enjoy the benefits of the act. To sum up, the Clapp bill aims first to afford a constitutional way of segregating the larger interests from the smaller, and secondly, to provide for trade agreements which shall

Henry W. Merritt, Plains, Pa., president elect.

be under Federal supervision so that no injury can be done to the people.

It was finally resolved that,

Whereas, the future and continued existence of retail merchants throughout the country depends upon a change of the Sherman Anti-Trust Act, which will allow the smaller business interests to coöperate against the growing evil on the part of a few to monopolize entire branches of the retail trade, and

Whereas, the Honorable Mr. Clapp, Senator from the State of Minnesota, has introduced in the Senate of the United States, Senate Bill 7017, providing for supplementary legislation to the Sherman Act, which will permit the smaller interests inclusive of the smaller merchants and laboring people to coöperate with each other, without being in violation of the Sherman Act, such legislation being by us deemed imperative for the future prosperity of the country; therefore be it

Resolved, that we heartily endorse and approve of Senate Bill No. 7017 as introduced by Senator Clapp of Minnesota.

FREERICKS IS HONORED.

Frank H. Freericks, who has been acting as legal adviser of the N. A. R. D. since Judge Errant's unfortunate illness, was presented with a silver set of 144 pieces by the executive committee in the name of the association. Charles H. Huhn, of Minneapolis, chairman of the executive committee, made the presentation speech. Starting in a humorous vein, he soon grew serious:

"When we were left in dire straits by the death of our former legal adviser," said Mr. Huhn, "we cast about a long while before we could find another. Finally we asked Frank Freericks and he agreed to act as our adviser, even though he was then suffering from overwork. In accepting the trust, he made one stipulation—that there would be no remuneration for his services.

"He has worked for us a long time and it is impossible for us to realize the great good he has done. Time alone can tell that, but we want him to accept this little token, not as remuneration, but as evidence of our appreciation and our gratitude."

THE TELEPHONE SITUATION.

Before commenting on the report of the telephone committee, we must tell of an amusing incident in which the chairman was a leading figure. It seems that the *Chicago Daily Tribune*, on the morning of Aug. 14, published a little interview with Julius Rosenwald in which the latter said: "'Give while you live' is a better motto than 'Live and let live,' which we used to see over oyster houses, bon-ton markets and other marts of trade, and which never meant anything whatever." "That," said Mr. Bodemann, "I consider is a slur upon our motto, and I move a telegram be sent to the editor of the *Tribune* giving him the devil." At this, everybody had a laugh.

When the discussion of the telephone situation was resumed, Secretary Potts requested all men in cities of 75,000 or more who are not satisfied with their telephone conditions to state their grievances to Mr. Bodemann. There is a disposition on the part of the association to deal with the officials of the telephone companies with a view to obtaining for its members a fair share of 'phone receipts. The telephone question appears to be a local issue varying in different localities. Mr. Webster of Detroit said that in his city the druggists are very well satisfied with present arrangements. There are two companies in Detroit, the Bell and the Home. Druggists get a 40 per cent commission without any guarantee on all calls except long-distance ones, on which they get 10 per cent. Mr. Huhn reported that in Minneapolis they must give a $4.00 guarantee, and even then get 20 per cent less than the Detroit druggists. In that city they get only 20 per cent of the telephone receipts. Mr. Huhn thought that there should be a level commission in all cities of 75,000 and upwards.

Charles Ehlers told of conditions in Cincinnati. He

Frank H. Freericks, Cincinnati, Ohio, who has done excellent work as advisory counsel for the N. A. R. D., and who was tendered a silver service in Milwaukee.

said the druggists there get 40 per cent on all calls over $4.50 a month. This rate applies to the larger stores. Smaller stores get 10 per cent if they take in over $3.00 a month. The company furnishes booths, and some stores have three or four. Booths have trebled the receipts.

Cleveland has two companies. One allows 40 per cent of all the money in the box at the end of the month. The other, the Bell company, gives the drug-

gists a 50 per cent commission on receipts over 20 cents a day. Conditions in Cleveland are now deemed ideal.

D. J. Reese said that satisfactory conditions prevail in Philadelphia. There are two telephone systems there, the Bell and Keystone. Mr. Pfluck declared that Philadelphia druggists have increased the telephone business in their city 300 per cent in seven years, all because they were satisfied with the contract. He impressed upon the convention the wisdom of remembering that fact in order that they might use it with telling effect in negotiating with the telephone companies.

Speaking of conditions in New York, Dr. Anderson said that the situation there could never have been cleared up without proper organization and conference with the company. A telephone committee was appointed by the druggists of New York, empowered to act with the company. This committee was responsible for the successful outcome of the trouble. The situation was serious. For a while it looked as though the pay telephone system would cease in New York pharmacies. But, thanks to the druggists' committee, the officials of the telephone company were brought to terms.

Wilhelm Bodemann, chairman of the telephone committee, expressed his displeasure over the action of certain cut-rate drug stores who offer their "free lunch" 'phones as an attraction to the bargain-hunting public, much to the detriment of the smaller stores.

FLURRY OVER DRUGGISTS' INDEMNITY EXCHANGE.

Considerable feeling was shown over the action of Executive Committeeman Thiesing of Cincinnati in bringing up a minority report of the Executive Committee bearing on an investigation of the Druggists' Indemnity Exchange and the Underwriters' Service Company, two insuring companies with headquarters in St. Louis, Mo. It seems that both are under the same management. While the Druggists' Indemnity Exchange ranks high among the members of the association, Mr. Thiesing expressed some uncertainty as to its safety and reliability.

E. H. Thiesing, Cincinnati, who created quite a ripple on the calm waters of convention harmony by criticizing the Druggists' Indemnity Exchange.

Such men as Charles F. Mann of Detroit and H. B. Guilford of Rochester at once demanded that this minority report be laid upon the table. Then the impression got out that there was a lurking desire to conceal the facts. So Mr. Guilford, seconded by Mr. Pritchard, moved that the minority report be taken from the table. This relieved all suspicion of any attempt to suppress the truth. Mr. Armstrong expressed his indignation that a minority report of the Executive Committee had been brought up. He said in substance that the Executive Committee thoroughly indorsed the Druggists' Indemnity Exchange and he resented as a reflection on the probity of the committee any attempt to put the Druggists' Indemnity Exchange on the grill, when these committeemen had once indorsed it. Finally Mr. Thiesing admitted that the matter was too voluminous for consideration in open session. To facilitate business the matter was referred to the committee on resolutions, where it died a peaceful death.

Charles H. Huhn, Minneapolis, re-elected chairman of the Executive Committee.

This was the only ripple on the peaceful waters of the convention, unless mention be made of Mr. Meissner's violent opposition to an attempt to close the nominations shortly after they had been made. Dr. Anderson wanted to do this in order to expedite the proceedings and give the resolutions committee a chance to begin work. But Mr. Meissner objected to such steam roller methods, as he called them. Therefore, the report of the nominating committee was received but held open another day. A somewhat spirited argument arose, too, over credentials, but of that we shall speak later.

ARGUMENT OVER CREDENTIALS.

It is too bad that so much time was lost arguing over credentials that there was little opportunity to discuss the coupon price-protection plan. Attorney Freericks would have been glad to say something on

that subject had he found a chance to take the floor. Mr. Boehm urged the establishment of a special bureau whose function it would be to explain by correspondence the workings of the coupon system.

The argument over credentials arose over a decision on absent and unaccredited delegates. There were but 179 out of a total of 902 accredited delegates present. The constitution of the association allows each State and affiliated local association a certain number of delegates, and provides that "the votes representing the absent delegates shall be cast in the same ratio as the votes of those present." The committee on credentials held that those delegates who were not present, and whose credentials had not been received by the association, were not regularly delegated. This aroused indignation on the part of representatives of associations which had only a minority of their delegates present, and who claimed that they were entitled to a full number of votes regardless of the representation in attendance.

It was finally resolved that each State association

Grant W. Stevens, Detroit, treasurer elect.

be accorded membership in the N. A. R. D. by the payment of $25.00 a year, and should be entitled to two delegates at each annual convention; and that local associations be accorded representation at the annual meetings of the N. A. R. D. on a basis of one delegate for each 25 members or fractions thereof.

BEAL RECOMMENDED AS WILEY'S SUCCESSOR.

The convention recommended the appointment of Dr. James H. Beal of Scio, Ohio, as successor to Dr. H. W. Wiley, resigned, as chief of the Bureau of Chemistry in Washington. A resolution to that effect was introduced by Frank H. Freericks. The convention acted upon it at once and then telegraphed the result to President Taft. Charles M. Woodruff said Dr. Beal would be the ideal man. Charles W. Tobey of Ohio said that Dr. Beal was not only a chemist but a lawyer, a man of sound judgment, and clean as a whistle. Mr. Pritchard maintained that Dr. Beal didn't want the job. To this Mr. Freericks replied that often the man best qualified for a position is least willing to accept it. He said further that if it be to the interests of pharmacy to have Beal in that place, why not force the position upon him in so far as that be possible?

The resolution, as finally adopted, was as follows:

Resolved, that the National Association of Retail Druggists in convention assembled, speaking for its membership of thirty-five thousand pharmacists, urges upon President Taft the appointment of Dr. James Hartley Beal to the position of Chief of the Bureau of Chemistry, for the reason that his special fitness and qualifications, his fearless, well-balanced and thoughtful determination, his noted disposition to avoid sensationalism and to thoroughly deliberate, make him the one man among men to serve truly the best interests and welfare of the public.

LIST OF OFFICERS.

The following officers were elected:

President, Henry W. Merritt, Plains, Pa.

First Vice-President, Sol A. Eckstein, Milwaukee.

Second Vice-President, H. W. Rietzke, St. Paul.

Third Vice-President, H. S. Keubles, Pella, Iowa.

Secretary, Thomas H. Potts, Chicago.

Treasurer, Grant W. Stevens, Detroit.

Executive Committee: Charles H. Huhn, Minneapolis, chairman; J. Arthur Bean, Boston; Herman C. Shuptrine, Savannah; Samuel C. Henry, Philadelphia; H. B. Guilford, Rochester; and A. E. Zuber, Chicago.

While it was necessary to elect six executive committeemen this year as heretofore, that will not be necessary in the future. Henceforth, by an amendment of the constitution, it will be necessary to elect only two members of the Executive Committee a year. Of the six men now elected, two will serve for three years, two for two years, and two for one year.

OFFICERS OF WOMEN'S ORGANIZATION.

The Women's Organization of the N. A. R. D. elected the following officers: President, Mrs. J. F. Waterhouse, Boston; first vice-president, Mrs. J. E. McBride, Youngstown, O.; second vice-president, Mrs. William Busch, St. Louis; third vice-president, Mrs. J. J. Seiberz, Louisville, Ky.; fourth vice-president, Mrs. J. O. Bosley, Wilmington, Del.; fifth vice-president, Mrs. R. G. Rutherford, Brooklyn, N. Y.; secretary, Mrs. Nellie Lee, Philadelphia; treasurer, Mrs. Anna J. Greenland, Cincinnati. Board of directors: Mrs. L. O. Wallace, Auburn, N. Y.; Mrs. W. S. Richardson, Washington, D. C.; Mrs. L. Emanuel, Pittsburgh; Mrs. J. T. Rowe, Mobile, Ala.; Mrs. A. J. Reis, Rock Island, Ill.; Mrs. S. A. Eckstein, Milwaukee; Mrs. C. D. Fox, Roanoke, Va.; Mrs. W. A. Warm, Keyport, N. J.

THE ENTERTAINMENT.

The attendance was good, the paid registration being over 1000. Numerous affairs were given for the visiting delegates and their families. One afternoon they were guests of Col. Gustave Pabst in a tour of inspection through the Pabst brewery. This was followed by a trolley ride to Whitefish Bay, where a fish dinner was given by Col. Pabst. The banquet of the Tampa-Cuba Cigar Co., held in the auditorium, was a very enjoyable affair. Mr. Guilford, Mr. Berger, president of the company, and Mr. Huhn made speeches that brought out plainly the prosperous nature of this co-operative enterprise.

Just where the N. A. R. D. convention will be held next year will not be decided till January. But the Cincinnati delegation were hot after it.

DENVER MEETING OF THE A. PH. A.

The Most Important Action Was to Create a "House of Delegates"—A Representative Legislative Conference Again Proposed—The Famous "Broken Senna" Case Featured —Pungent Paper by Dr. H. H. Rusby on Legal Shortcomings of the U. S. P. —New Requirements Imposed by Conference of Faculties — The Boards Discuss Reciprocal Registration—Nashville Selected for Next Convention.

Seventeen years ago the American Pharmaceutical Association met in Denver. This year it was the pleasure of the organization to convene once again in that beautiful city. A better place could not have been selected. The country was so unusual, the scenery so attractive, the people of Denver so hospitable that every one returned full of delight with the trip. Many took the fifty-mile trolley ride winding among the foothills skirting the Rockies on the way. Others visited Wilmore's Dahlia Farm—a paradise of flowers. One day was given up to a trip to Glacier Lake. After the convention, any number of members and their families left for the Yellowstone.

THE CREATION OF A "HOUSE OF DELEGATES."

But while it is tempting to dwell on the pleasures attending the A. Ph. A. convention, this is not intended

F. W. Meissner of La Porte, Indiana. Robert S. Lehman of New York, and Hugo Kantrowitz, also of New York, are taking a little stroll in the park.

as a travelogue. A lot of hard work was accomplished. Many matters of importance were brought up for consideration. The first step of real consequence was a proposal to form a House of Delegates, a suggestion that apparently emanated from Treasurer H. M. Whelpley and General Secretary James H. Beal. This body, it was intended, should serve as a sort of hopper into which should be emptied all half-baked suggestions to emanate later in a form acceptable for prompt consideration. It was Secretary Beal's idea that the House of Delegates should be a sort of clearing house where resolutions could be referred for the purpose of separating the wheat from the chaff. The proposals, molded into shape by the House of Delegates, could then be presented to the Council, which in turn would report them to the general assembly. The House of Delegates, it was pointed out, could handle things which couldn't be brought up conveniently in the general sessions.

ARGUMENTS PRO AND CON.

At first there was a slight undercurrent of suspicion among those not yet acquainted with the functions of the House, lest it serve as a means of centralizing authority in the hands of a few and thus lessen the weight of the council and the general membership. But Secretary Beal made it very clear that the House would not be able to usurp any of the power already vested elsewhere. It was simply intended to expedite business. E. G. Eberle brought out the point that the function of the House of Delegates would not be that of *initiating* resolutions, but only of *considering* or redrafting those which were recommended to it.

A delegate, as Secretary Beal pointed out, is little more than a name. Prof. Remington, too, said that it had always pained him to see delegates come to the convention and then have nothing to do when they got there. The Council has been doing the work.

If a delegate is not a member of the Association he can talk only by special permission. This is an important point as we shall see later, because the House of Delegates will be composed in a measure of men not members of the A. Ph. A. Under present conditions, different bodies are invited to send delegates who upon their arrival have little or no function.

DETAILS OF THE PLAN.

In view of the fact that the formation of the House of Delegates marks such an important change in the organization of the A. Ph. A., we print the following resolutions creating this new body and defining its duties. They were adopted by the Association:

1. There is hereby created a House of Delegates to have and exercise such functions as are herein or may be hereafter specified by the Council.

2. Until the membership of the House of Delegates shall be otherwise determined by the Council, it shall consist of such regularly elected or appointed delegates from State and local societies, colleges and schools of pharmacy and delegates from the National Association of Retail Druggists, National Wholesale Druggists' Association, American Medical Association, National Association of Board of Pharmacy, Women's Organization of the National Association of Retail Druggists, National Association of Manufacturers of Medicinal Products, American Chemical Society, Association of National and State Food and Dairy Departments, the National Association of Pharmacologists, pharmacists in the government service, and scientific men in the employ of the government, the credentials of all of whom shall be approved by the Council, and five members of the Council appointed by the Chairman of the Council. The President, President Elect, Treasurer, General Secretary, and the Chairman and Secretary of the Council shall be members *ex-officio*.

3. The elected or appointed delegates shall hold office for one year, or until the credentials of their successors shall have been approved by the Council. Each society or institution recognized shall be entitled to three delegates, and each delegate shall be entitled to one vote. No delegate shall act as the proxy of another delegate not present, nor as delegate for more than one society or institution. Any member of the Association may attend any session of the House of Delegates, and shall have the privilege of the floor.

4. The House of Delegates shall organize annually by the

election of a Chairman, two Vice-Chairmen, and a Secretary. For the purpose of such annual organization the first session of the House shall be called to order by the Chairman, one of the Vice-Chairmen, or the Secretary of the preceding House, or in the absence of all of them, by the Secretary of the Council.

5. The House of Delegates shall have authority to adopt all rules and regulations necessary to the proper conduct of its business, and not inconsistent with the Constitution and By-laws of the Council.

6. The House of Delegates shall hold at least one session during the annual meeting of the Association, at an hour previously determined by the Council, and such additional sessions as may be necessary for the transaction of its business, but shall make a final report of business transacted to the final session of the outgoing council at each annual meeting.

7. Until otherwise determined the House of Delegates shall exercise the following functions:

(*a*) To receive and consider the reports of delegates from the bodies which they represent in the House of Delegates.

(*b*) To act as a general committee on resolutions and to report to the Council not later than its last session a series of resolutions upon topics concerning the general welfare of the Association or concerning any features of the Association's work.

(*c*) To consider and report upon such resolutions, and upon such other subjects as shall be referred to the House of Delegates by the Council or by the Association in General Session.

8. Until otherwise provided the order of business at the first session of the annual meeting of the House of Delegates shall be as follows:

(*a*) Calling the roll of delegates whose credentials have been approved by the Council.

(*b*) The reading of communications from the Council or from the Association in General Session.

(*c*) The election of officers.

(*d*) The appointment by the chair of a sub-committee on resolutions to prepare and put into proper form, resolutions for subsequent consideration by the House of Delegates.

(*e*) Calling the roll of delegations for the reception of reports, resolutions and communications. At all subsequent sessions of each annual meeting the order of business shall be such as the House of Delegates shall determine.

9. At its first annual meeting the House of Delegates shall consider and report to the Council a body of by-laws and any recommendations it may have to offer concerning the form of organization, method of working, or concerning the scope and character of the functions which should be exercised by the said House of Delegates.

Prof. José P. Alacán, the well-known pharmacist and teacher of Havana, Cuba, was at the Denver convention with his family. Professor Alacán is the gentleman at the right, and his assistant, Dr. Francisco Remirez, stands at the left.

Some objections were raised to the name "House of Delegates." A few said it was too common, being already in use in various organizations. Others, however, claimed the name was too pretentious. To the latter criticism, Dr. Beal replied that the name had been purposely made big in order that the members of the House might be inspired to live up to it. It was like the man, he said, who hung a eulogy to his first wife on the wall in order that his second wife, seeing it, might take inspiration therefrom. Dr. Beal went on to say that if the House of Delegates proves a success, it would be given further powers.

Dr. Anderson was made chairman of the House of Delegates. His experience as chief of the resolutions committee of the N. A. R. D. should make him an excellent man for the office.

JUDGE HAND'S KNUCKLES RAPPED.

A very lively discussion arose in the meeting of the National Association of Boards of Pharmacy over the slur cast some months ago by Judge Hand of New York upon the pharmacists of this country. The matter may have been brought to the attention of the Association by the paper of Prof. Rusby read the evening before, criticizing the conditions that made possible such a decision as that of Judge Hand in the "broken senna case." The Judge, piqued by the criticism of his decision among pharmaceutical men, had referred to the druggists in slighting terms. This prompted the following resolution:

The National Association of Boards of Pharmacy, by a special committee referring to the statement of Judge Hand, in the famous broken senna case, reported as follows:

Whereas, the Judge has issued the statement that pharmacists are "men of no great learning," be it

Resolved, that we protest against this statement for the reason that it does a great injustice to men of a learned profession who, as a class, will compare in every way with those of any other profession.

Caswell A. Mayo advised the delegates present to resent any such attack appearing in a newspaper by writing a red-hot letter to the editor. "When I see anything like that," said he, "I go right after them."

DR. RUSBY'S PUNGENT CRITICISM.

The foregoing action of the National Association of Boards was evidently called forth, as we have suggested, by a paper read by Dr. H. H. Rusby before the Section on Education and Legislation. This paper was entitled "The Legal Aspects of the Pharmacopœia," and was visibly inspired by Judge Hand's decision. We may say parenthetically in this place that the Hand decision

Here we have, reading from the left, Prof. Clyde M. Snow of Chicago, Hugo Kantrowitz of New York, and Prof. H. C. Washburn of Denver. Unfortunately Professor Washburn fared rather badly at the hands of the photographer.

in the now famous "broken senna" case was discussed by the BULLETIN OF PHARMACY at some length on pages 265 and 266 of the July number. Those who are interested in the merits of the question we refer to our former article. Reverting now to Dr. Rusby's paper, for which we unfortunately have very little space, we may quote certain parts as follows:

It would be ungenerous, if not actually unjust, to criticize the present Pharmacopœia because of its shortcomings as an authority in the interpretation of our pure drug statutes. True, it was compiled for the purpose of establishing standards for the articles recognized, but, there being at that time no Federal or very important State statute based directly upon these standards, the latter were prepared with a view to their *professional* rather

than their *legal* application, and the vast influence for good and evil which was to be wielded, and now is wielded by those standards, had probably occurred to the mind of none. Now the difference between the *legal* and the *professional* application of a standard, while perfectly clear to those who have abundant experience, is not so to all others. If it were, this paper would not be presented.

Let us, for example, consider the subject of senna. We have, first, the title, which is merely "senna." By a common-sense construction, this would be extended to include Alexandria senna and India senna, because these are mentioned in the description. By a narrow construction, these would be excluded, and I have actually known an attorney to argue for such exclusion, in a very similar case. Moreover, the title "Tinnevelly senna," though a fully recognized synonym of India senna (professionally and in common sense) would be excluded, unless given in the index of the book. This would be true of all other synonyms. Furthermore, it has been frequently held that the term senna itself would be so excluded, if coupled with a qualifying word to show its condition, as broken, cut, granulated, powdered, in No. 60 powder, etc.

Let us next consider the definition: "The dried leaflets of *Cassia acutifolia* Delile (Alexandria Senna), or of *Cassia angustifolia* Vahl (India Senna) (Fam. Leguminosæ)."

Now, if a 500-pound bale of senna was sold that contained one pound of stems, stones, seeds, other leaves, or foreign matter of any sort, its sale would be prohibited according to legal technicality, because this definition refers only to the leaflets. This interpretation is, however, in the case of senna, modified by something which follows, and which will be considered further on. Now a judge, professing to be very practical, says that such an interpretation would be absurd, because practically no senna of this description would ever be found in commerce, so that the enforcement of this absolute standard is impracticable. It being thus established, on sound reasoning, that some foreign matter *must* be allowed, reason is at once dethroned to make way for the declaration that, no permissible amount being specified in the Pharmacopœia, any amount may be admitted! No professional man, and no rational being, would so rule. But judges are not permitted to officiate rationally. A rational being is one who seeks a desirable result or end, and who adapts and employs his means for securing that result. A court is a machine that has been constructed to exalt, in practice, the means above the end, to fall down and worship at the shrine of the means and to rule that the end is of no consequence when its attainment requires the subordinating of the means unto it. It is pointed out to him, that the Department, seeing this necessity, has decided to allow 5 per cent, but he replies that this is legislation and that the Department has no right to read into the law things which are not there. It is thus decided that any amount of adulteration can be permitted with senna, for the specific reason that the Pharmacopœia forbids any adulteration whatever!

For these reasons Dr. Rusby thought action should be taken along the following lines, with reference both to the U. S. P. and the N. F.:

1. That some provision be made, in all cases, for the presence of impurities in drugs, and that this provision be so worded that it shall be sufficiently comprehensive.

2. That a drug under a name not found in the book, but which is a modification or combination of a name or names found therein and understood to apply to the same article as that so named, shall be subject to all the requirements for the drug so understood.

3. That supplements containing additional tests, approved by the committee, shall be published annually, and shall have the same force as the original text.

RECIPROCAL EXCHANGE OF CERTIFICATES.

An interesting situation arose in the meeting of the National Association of Boards of Pharmacy over the question of reciprocal exchange of certificates between the States. Mr. Dodds of Illinois introduced a resolution recommending among other things that the rating for reciprocal exchange be raised two points above the present average to 77. He held that boards of pharmacy strained a point or two in favor of candidates who were slightly deficient. Mr. Dodds went on to say that while the Illinois Board might pass a man in that way, it hesitated to recommend him to other States. By raising the average two points a man not fully qualified can be prevented from registering in other States.

F. B. Lillie said it was generally admitted that certain boards favor their own candidates. Local conditions do govern the registration of candidates by the State Board. Mr. Lillie argued that to remove all doubt of a man's fitness, the mark should be raised a few points above the average if he desires the privilege of practicing in another State. A man's condition sometimes influences the board. If he be poor and desires to go into business, the board, a few members of which know the deserving fellow personally, may be influenced to pass him. But Mr. Lillie contended that men who thus slide through their examinations should not be allowed to practice in other States unless they pass the examination in the State which they desire to enter.

But this idea did not prevail. The majority held that a man who was registered in one State was entitled to reciprocal registration, regardless of the conditions under which he first obtained his papers. So they voted down the proposition to raise the examination requirements to 77 per cent for those who want the privilege of reciprocal registration.

Of course, the action of the Association of Boards in this matter is only advisory. The Association can't pass a resolution compelling State boards to accept men. The Association merely suggests such action. The real power resides in the individual State board. It can accept or reject candidates regardless of their grades.

There was some agitation over a proposition that candidates for registration before a State board be made to pay $5 to the National Association of Boards in addition to the regular fee to his own State for registration. Frank Freericks, however, said this wouldn't be legal in all States.

This interesting group of N. F. Revisers was snapped in front of the Brown Palace Hotel. Reading as usual from the left, we have Prof. Harry Vin Arny, E. Fullerton Cook, Prof. Clyde M. Snow, Leonard A. Seltzer, and Wilbur L. Scoville. These were the only members of the National Formulary Committee at the convention.

DISCUSSION OVER DEGREES AND STANDARDS.

In this connection we might call attention to the remarks of Professor Remington in the meeting of the Conference of Pharmaceutical Faculties where the question of degrees was up for consideration. Only three States, he said, have prerequisite laws. He cautioned the teachers present that they must not make it too hard for men to get a college education. The universities, he said, are giving correspondence courses in pharmacy and we must not make the requirement for entering college so high that the men will study pharmacy by mail instead. Give a chance, he urged, to the man of only fair means and fair ability. What are the

attractions of the retail drug business, he asked, that you feel privileged to make the requirements so high? Professor Remington felt that one must consider this proposition with both feet firmly on the ground, instead of getting up into thin air. Pharmacy for pharmacists, he urged, not pharmacy for analytical chemists. The colleges provide suitable courses and higher degrees for men who want to be government chemists

Dr. W. C. Anderson, Brooklyn, N. Y., elected chairman of the newly created "House of Delegates."

or hold some such high positions. But how about the apothecary? What are we doing for him? The colleges should keep their eye on the apothecary and do everything possible for him.

Dr. Ascher, following Prof. Remington, likewise cautioned colleges against advancing the requirements too high and putting too many restrictions on candidates for admission.

Professor Remington argued for the approval of the degree of "Doctor of Pharmacy." Other professions confer the doctorate degree, and why not pharmacy?

NEW REQUIREMENTS OF THE CONFERENCE OF FACULTIES.

The Conference of Pharmaceutical Faculties concerned itself with the establishment of requirements for entrance into the colleges, and for graduates therefrom. While the members came to no agreement as to how much training should entitle students to the various degrees that are given, they did succeed in laying down well-defined entrance requirements. These cannot be evaded. It shall be the duty of each member of the Conference of Faculties to prove the credentials presented by each student. An executive committee shall examine those credentials and pass upon them.

Evidence of education of 15 counts beyond the eighth grade shall be required of each candidate for admission. A "count" consists of one hour's instruction a week during the school year. As Prof. Koch explained, a count was a unit of measure whereby it would be possible to express the requirements for admission in the briefest form possible. No mention is made of the words "high school" in the entrance requirements. The student can get his education anywhere by tutoring and private study if he so desires.

The conference shall have a right to investigate any school. The schools must prepare, on special blanks, complete lists of students enrolled, showing the credentials and standing of each student. These records shall be certified by the Dean and submitted for examination to the conference.

A NATIONAL LEGISLATIVE CONFERENCE PROPOSED.

W. A. Hover of Denver, in his speech conveying the greetings of the National Wholesale Druggists' Association, urged that more time be given to legislative suggestions. The sale of narcotics and habit-forming drugs, for instance, uncovers a problem requiring the united efforts of all branches of the drug trade. "We, as wholesalers," said Mr. Hover, "are just as anxious as the retailers to bring about statutory reforms that shall correct the narcotic evil. We are all working for the same end to restrict the sale of narcotics to the proper channels and for purely medicinal purposes."

To bring about a solution of the problem, said Mr. Hover, there should be a coöperative effort on the part of retailer, manufacturer and wholesaler. He then recommended a joint legislative conference composed of representatives from the M. A. M. M. P., N. W. D. A., N. A. R. D., and A. Ph. A. to work out a practical law for regulating the sale of habit-forming drugs.

W. A. Hover, the well-known Denver jobber, who suggested once more that a representative legislative conference be called under the auspices of the A. Ph. A.

Last year, at the Boston meeting, Henry P. Hynson, of Baltimore, suggested a National Legislative Conference to be composed of representatives from all branches of the drug trade. Mr. Hynson's suggestion has since received the attention of the N. A. R. D. and A. Ph. A., and will probably be put into effect before January 1.

It seemed to be the opinion of the convention, however, that a National Legislative Conference should be held under the auspices of the A. Ph. A., because all branches of pharmacy are represented in this body. Such a conference belongs properly to the section on education and legislation.

Charles M. Woodruff, who attended the convention as a delegate from the National Association of Manufacturers of Medicinal Products, said that a national conference would do much good, though not necessarily in a single session. Considerable work would have to be done by the conference. There is so much diversity of opinion about laws, so much conflict between State and Federal rulings, that we don't know exactly where we are at. A national legislative conference will, it is hoped, bring about greater uniformity in the law and lessen the confusion. Both State and Federal rulings will receive the attention of the conference.

SCHOLTZ ADVOCATES COMMERCIAL PHARMACY.

One of the most interesting talks delivered at the convention was an address before the Commercial Section by E. L. Scholtz, who conducts a chain of drug stores in Denver under the name of the Scholtz Drug

Dr. H. H. Rusby, of New York, whose paper indirectly criticizing Judge Hand for the latter's decision in the "broken senna" case called forth a spirited resolution.

Company. Near him sat Mr. Kendall, the owner of a very prosperous prescription pharmacy in Mississippi. There were two types of druggists, each the antithesis of the other, but each a successful master of his own particular style of pharmacy. They were not only able druggists but excellent speakers as well, and it was a pleasure to listen to their debate.

Progressive pharmacies, contended Mr. Scholtz, the stores that are popularized, are the ones that are putting up the larger number of prescriptions. Mr. Scholtz cited a case in point. A drug store had been making money merchandising, but had neglected prescriptions. At the suggestion of a medical friend, the owners established a separate prescription department, without expecting big returns. But the department soon became one of the most profitable in the store.

On the other hand, however, Mr. Scholtz wanted to have a strictly physicians' drug store in Denver to carry doctors' needs only. But the physicians advised him against it, saying that such a pharmacy would not attract any more prescription patronage than a commercial drug store, and the landlord didn't want to rent his place to a strictly prescription establishment. There is no advantage in the purely prescription drug store in the city, argued Mr. Scholtz. If you want to have the least revenue from the place, and have plenty of time to read the newspaper, run a prescription pharmacy. But if you want to make the most out of the stand conduct a mercantile drug shop! The public demands it, and we can't stop evolution. With the old-fashioned drug store you were sick when you went in and sick when you came out. But the modern drug store is an emporium of fashion.

But Mr. Kendall of Mississippi had other views of the business. "I run a strictly prescription business," he said, "and I advertise that I own the only drug store in the city of Meridian. I don't have a package of paint or garden seed in the place. I have a half-dozen dispensers in my store and don't care to change my system. My idea of the drug business is to specialize and be a real pharmacist."

Mr. Kendall said furthermore that the place for a druggist is in the front of his store. Contrary to Mr. Scholtz, who does a soda business of $100,000 a year in his various stores, Mr. Kendall does not have a fountain. He maintained that a woman who sits down at a fountain to drink soda will go elsewhere for a fountain syringe or package of toilet cream, so there you are.

SOME OF THE PRESIDENT'S RECOMMENDATIONS.

President John G. Godding of Boston, in an address which, unlike many presidential papers, had the marked merit of brevity, recommended among other things that the association carry out its purpose and undertake the publication of a book of recipes—a collection of unofficial formulas. This recommendation was approved subsequently by the committee to which the president's address was referred, and the Council was requested to take the necessary steps to carry the recommendation into effect, the suggestion made, however, that in the compilation of the recipes only those be selected which will prove uniformly reliable. Under the heading of drug reform, President Godding bewailed the fact that while the pharmacist must comply rigidly with the various food and drug laws, the physician is permitted to go scot-free. The committee, acting upon this complaint of the president, expressed its opinion that "all who dispense drugs in any way should be made amenable to the law governing the traffic in drugs." The committee also thought that the subject should be referred to the Section on Education and Legislation for further action of a definite sort. Other subjects touched upon by President Godding in his address were the National Formulary, the Journal of the A. Ph. A., the Pharmaceutical Syllabus, the N. A. R. D., the State associations, the local branches, prerequisite legislation and deceased members.

A JOINT BOARD OF HEALTH.

We have in each State five different boards to look after the public health. They consist of from five to seven members each. Such methods, said Secretary Beal, are wasteful. Nor are they efficient. They don't exclude the incompetent from practicing their professions. They don't keep poor drugs out of the market.

Secretary Beal recommended that these different

bodies be replaced by one central board composed of representatives of all the different professions affected? This would do away with the present multiplicity of boards. Dr. Beal maintained that such a system would be more economical. We should have one attorney, instead of five, and he would be able to accomplish more, for this reason: To-day when we try to enforce a pure food and drug law in a locality the attorney, hired to do the prosecuting, hesitates lest he offend the community upon whom he depends for his practice. The attorney for the defendant has only to claim to the magistrate and the jury that the pharmacy laws aim to give a certain body a monopoly of the drug business and the guilty man goes free. An attorney, hired by a joint State board of health, could work more effectively.

Dr. Schneider, of San Francisco, approved of this centralization of power. Prof. Rusby, too, thought well of Secretary Beal's plan, but added that every locality must have its own board to look after ice-cream plants, bakeries, and food shops generally. But he thought that the enforcement of the law, after the experts had made their report, should reside in a central board.

HONORARY MEMBERSHIP IN A. PH. A.

In one of the meetings of the Council Joseph W. England suggested it would be advisable to bestow honorary membership on men who have made contributions to pharmacy abroad. Dr. Whelpley received this proposal coldly. He reminded the Council that the last time honorary members had been suggested the idea had been turned down because the men thus remembered showed little appreciation of the honor.

Chas. Caspari, Jr., said he was one of those who opposed the indiscriminate distribution of such honors for the reason that American pharmacists had been notoriously slighted abroad. That is to say, they had received no signal of recognition. Neither England nor France had conferred any honors upon our pharmacists, said Dr. Caspari. America, on the other hand, has been very liberal. Dr. Caspari then added: "They may think we are trying to honor ourselves by getting into our ranks men of distinction. We should be very sparing in the distribution of honors."

Secretary Beal took another view of the matter. He cited one or two instances where prominent foreign pharmacists had shown real interest in the work of their American brothers and paid them several courtesies. Mr. England added that the cold attitude of European pharmaceutical leaders to us is changing. They can be induced to give us their coöperation and support. It was finally decided to elect one or two foreign pharmacists of note to honorary membership in the association annually.

NOMINATIONS FOR NEXT YEAR.

Following out its usual practice, the association selected three sets of nominees for the general offices, the elections to be made later on by mail. The nominees are:

For president: Charles M. Ford of Colorado, George M. Beringer of New Jersey, and F. W. Meissner of Indiana.

For first vice-president: Franklin N. Apple of Pennsylvania, Jose P. Alacan of Cuba, and Ernest Berger of Florida.

For second vice-president: G. H. P. Lichtardt of California, W. S. Richardson of the District of Columbia, and John C. Wallace of Pennsylvania.

For third vice-president: S. K. Sass of Illinois, L. D. Havenhill of Kansas, and D. F. Jones of South Dakota.

Candidates for the Council, three of whom are to be elected: J. G. Godding of Massachusetts, S. L. Bresler of Colorado, H. C. Packard of Massachusetts, L. C. Lewis of Alabama, Charles E. Caspari of Missouri, W. J. Teeters of Iowa, W. C. Anderson of New York, Charles Caspari, Jr., of Maryland, and Leonard A. Seltzer of Detroit.

ELECTIONS.

Of course, General Secretary James H. Beal and Treasurer H. M. Whelpley were reëlected. Owing to the good work of Treasurer Whelpley the delinquency list of the association has been reduced to almost *nil*. Every member is paying his dues.

The association is not apt, either, to lose the valuable services of Secretary Beal, if we may judge from his speech of acceptance after being made secretary of the association for another term. He said: "I do not recognize that there is any position where one can do more for American pharmacy and the people at large

A. V. Pease, Fairbury, Nebraska, chairman elect of the Commercia Section.

than he can as secretary of the American Pharmaceutical Association. I seek no higher honor." These remarks are very significant just now, since Dr. Beal has been spoken of repeatedly as Wiley's successor in Washington.

New chairmen of the various sections were elected as follows: Section on Commercial Interests—A. V. Pease, Fairbury, Nebraska; Section on Education and Legislation, Prof. W. J. Teeters, Dean of the School of Pharmacy of the University of Iowa; Section on Practical Pharmacy and Dispensing, J. Leon Lascoff, of New York; New Section of Phármacopœia and National Formulary, S. D. Havenhill, of Kansas; Historical Section, J. G. Godding, of Boston.

The Scientific Section has reorganized and will henceforth have its own by-laws. The following have been elected for the next year: President, F. R. Eldred, of Indianapolis; first vice-president, John M. Francis, of Detroit; second vice-president, W. L. Scoville, of Detroit; secretary, F. P. Stroup, of Philadelphia.

NASHVILLE NEXT MEETING PLACE.

The next convention of the A. Ph. A. will be held in Nashville, Tenn. In view of the central location of this city, a large attendance is looked for.

TWENTY-FIVE DRUGGISTS AND THEIR INCOMES.*

By HARRY B. MASON,
Editor of the "Bulletin of Pharmacy."

For years I have been contending that many druggists fail to make their stores yield them a sufficient measure of profit. In making this statement I am not criticizing druggists for the *size* of their business—that is another story. What I have particularly in mind is the question of returns—making every dollar's worth of business produce what it ought to in the way of net earnings. Regardless of the volume of his sales, a good merchant should attain a more or less definite percentage of profit, and if he doesn't do this he is failing to make the most of his business. Now in order to show the wide difference between druggists in this respect, I propose to present a comparative table exhibiting in detail the actual facts about 25 druggists scattered throughout the country.

Back in 1906 I read a paper entitled "Eleven Druggists and Their Incomes" at the Indianapolis meeting of the American Pharmaceutical Association. This paper was subsequently printed in the volume of proceedings for that year. I am now using over again the statistics concerning these eleven druggists, and am supplementing them with the facts about fourteen more so that more accurate conclusions may be reached. Without further introduction I shall now present the table, divided in two portions because of its length:

	A	B	C	D	E	F	G	H	I	J	K	L	M
Annual sales	$26,108	$25,200	$25,150	$25,107	$23,823	$21,000	$19,658	$19,507	$17,757	$16,028	$15,557	$13,590	$13,336
Cost of goods sold	17,600	17,159	15,773	12,336	16,496		11,407	11,918	11,437	10,249	9,922	8,019	8,898
Gross profits	8,508	8,041	9,377	12,771	7,327		8,251	7,589	6,320	5,779	5,635	5,571	4,443
Expenses	4,684	4,835	4,719	6,000	6,702		3,643	4,223	5,520	4,011	3,878	2,705	3,106
Net profits	3,824	3,206	4,658	6,771	625	1,716	4,608	3,366	800	1,768	1,757	2,866	1,337
Percentage gross profit (on sales)	32½%	32%	37%	51%	31%		42%	40%	36%	36%	36%	41%	33⅓%
Percentage expense	18%	19%	19%	24%	28%		18½%	22%	31%	25%	25%	20%	23⅓%
Total income (including proprietor's salary)	$5,824	$4,286	$6,658	$7,670	$1,825	$3,116	$5,608	$5,216	$2,000	$2,768	$2,957	$3,646	$2,337

	N	O	P	Q	R	S	T	U	V	W	X	Y
Annual sales	$12,224	$10,541	$10,066	$9,758	$8,500	$6,152	$7,845	$7,717	$7,336	$7,331	$6,426	$6,390
Cost of goods sold	7,814	5,264	5,457	5,959	5,100	5,219	5,323	3,999	4,115	4,432	4,160	3,511
Gross profits	4,410	5,277	4,609	3,794	3,400	2,933	2,522	3,718	3,221	2,899	2,266	2,879
Expenses	2,919	2,728	2,400	2,112	2,600	1,677	2,089	2,683	1,655	2,463	1,968	1,155
Net profits	1,491	2,549	2,209	1,682	800	1,256	433	1,035	1,566	436	278	1,294
Percentage gross profit (on sales)	36%	50%	45¾%	39%	40%	36%	32%	48%	44%	40%	35%	40%
Percentage expense	24%	26%	24%	21⅝%	30½%	20½%	26⅔%	34¾%	22½%	33½%	31%	19⅔%
Total income (including proprietor's salary)	$3,051	$3,449	$3,109	$2,607	$2,000	$2,256	$2,261	$2,235	$2,466	$1,636	$1,278	$1,823

First, now, a few words of explanation about these tables. The "cost of goods sold," as the phrase indicates, does not represent the actual purchases of the year, but, instead, the purchases as added to or subtracted from by the inventory differences. The "expenses" invariably include the item of proprietor's salary, which runs from $600 up to $2000 or more according to the size of the business. The "total income" might seem a little confusing if I did not say that this was gotten by adding the proprietor's salary to the net prof-

*Address delivered by invitation before the Iowa State Pharmaceutical Association, Sioux City, July, 1912.

its. The former, as already explained, is included in the expense account, but it is used again here for the purpose of showing the total yield which the druggist gets from his business. The other facts in the table are self-explanatory. Deducting the cost of goods sold from the annual sales, we learn the gross profits, and from the gross profits deducting in turn the expenses, we are left with the net profits. The *percentage* of gross profit is then secured by dividing the volume of gross profits by the volume of sales. In similar fashion the *percentage* of expense is derived by dividing the volume of expense by the volume of sales.

Now let us study some of the exceedingly interesting things about these tables. There is a lot of food for thought here—material worthy of serious and careful consideration. I shall content myself, however, with pointing out a few things only, for the most part leaving the tables to tell their own story to those who care to ponder over them.

SURPRISING VARIATIONS IN EXPENSES AND PROFITS.

I have said that the object of this paper, and the purpose of these tables, were to show the great differences between druggists in profit-making capacity. Now witness the facts—consider first, for instance, the percentage of gross profit yielded in these 25 stores. *It varies from 31 to 51!* Notice next the percentage of expense. *This varies from 18 to 35!* Thus the percentage of profit realized by some druggists is less than two-thirds that of their neighbors, while it costs some men twice as much to do business as it does others! There is really no excuse for wide variations of this character. It is true that some druggists have to meet more competition than others; that prices vary in different localities; that as a rule expenses are higher in the city than in the country; but with a full realization of such conditions I am neverthless convinced that these things do not explain except in part the widely varying incomes which different druggists derive from their stores, and that in the last analysis the results can be traced directly to the druggists themselves.

Now let us study some cases which illustrate this point. You will see from the tables that the businesses are enumerated in the direct order of their sizes, beginning with the largest one of $26,108 a year and running down through the list to a store having annual sales of only $5890. We start off with five businesses of just about the same volume—A, B, C, D and E. These were all in what you might call the $25,000 class. The conditions were much the same in all 5 cases; there were no great differences of environment to explain away pronounced differences in results; and with establishments of about the same size you would therefore expect expenses and profits to be very nearly alike. But notice the wide variations. D realized a total income of $7670 a year, and C $6658, while E was able to make but $1825. Admittedly, however, there is something peculiar about the large gross profit of 51 realized by D, and with this exception it will be seen that the percentage of profit of all five men ran about the same, with C a little in the lead. The percentage of expense with A, B and C was also nearly identical, running from 18 to 19, whereas E had an expense of 28 per cent. It is this high and unnatural expense of E, for a business of that size, which accounted for his small total income from the business. He ought to cut down expenses and do it quick! His percentage of profit, too, was the smallest in the group, and his net profit was only three per cent when it should have been at least ten.

Next we have G and H, with businesses practically alike in volume of sales. These stores were in the $20,000 class, and they both did about equally well. The singular thing about it is, though, that G is located in the city of Chicago, while H is in a small country town. The city man was able to make a gross profit of 42 per cent, while the country druggist, theoretically supposed to get better prices, could only make 40 per cent. Likewise, strangely enough, the city man's percentage of expense was less, even though it usually costs considerably more to do business in a big town like Chicago than it does elsewhere. G's showing, however, is really much above the average, and it is very apparent from his expense statement, as I have it in detail, that he worked hard himself and probably got along with one registered clerk and one boy.

DIFFERENCES IN PROFIT-MAKING CAPACITY.

Next we have a group of five men in a class of their own—I, J, K, L and M. These businesses ranged from $14,000 to about $18,000 annually. Here the surprising fact is that L, down toward the lower end of the group in point of sales, made more money than the

others. With sales of $3000 less than I, he realized a total income of $3646 as against $2000. His percentage expense was the lowest in the group, while his percentage of gross profit was the largest—and these figures tell the whole story. They tell the whole story, indeed, with every business, and they are the figures which should be watched most closely. Keep your percentage of gross profit up, and your percentage of expense down—that's a safe rule.

We pass on to a small group made up of O, P and Q, with $10,000 businesses. These men are not so very far apart, but the striking fact here is that O made an astonishing *net* profit of 24 per cent despite the fact that the business was run by a manager. O is a physician who was compelled to turn the store over entirely to employees, but, though a professional man, he is possessed of keen commercial instincts, and he sees to it that the vital question of profit is always considered. He pays his manager a salary of $900 a year, and he gets net profits of $2549 from the business. I have arbitrarily added the $900 to the volume of net profits in this case, making a total income of $3449, in order to put the statement on the same comparative basis with the others, since this is what the manager would be realizing if he owned the business as do the other druggists represented in the tables.

Another interesting group is made up of R, S, T, U and V. These businesses are in the $8000 class. Here we find, as in the previous group, that the man whose sales are smallest makes the most actual money expressed in terms of total income. He realizes an income of $2466 on a business of $7336—a strikingly good yield. His percentage of expense is very low for a small business, and his percentage of profit is high. He has realized the truth that the farther apart you can keep these two figures the better off you are. To force one up, and to screw the other down, is the chief problem in business. One man in this group, U, has an abnormally big expense, nearly 35 per cent, but fortunately he realizes a big gross profit of 48, so he "gets away with it." A gross profit of 48 is certainly astonishingly good, and this man must have a direct pipe line of some kind.

Finally, we have three druggists left—W, X and Y—with small businesses ranging from $7331 to $5890. Here again the low man in point of sales is the high man in point of profit. Y does less than $6000 worth of business a year, and yet he gets a nice little income from it of $1800. Not so bad! He is located in a country town; his expenses are small; his wife probably helps him out at times, and even though the business is small he doubtless lives quite well.

WHAT THE PERCENTAGES OF EXPENSE AND PROFIT OUGHT TO BE.

Now I have said that, volume of sales apart, success in business largely depends upon keeping the percentage of gross profit and the percentage of expense as far apart as possible. Put a big wedge in between these figures and drive them away from one another! It will be seen from the tables that, in a certain rough sense, the percentage of expense increases as the business diminishes—that is to say, it costs relatively more to conduct a small store than a large one. What are called the "overhead expenses" are condensed over a smaller area of sales. Thus the tables begin with A, whose percentage expense is 18, and gradually, although not uniformly, the percentage of expense increases until, with some of the smaller businesses, it runs up over 30 per cent. E, with a business of $23,823, is a prominent exception to this rule. His percentage of expense is 28, when it ought not to exceed 20 or 22 with a business of that size.

Is it possible to say with any degree of accuracy what the percentage of expense and the percentage of gross profit ought usually to be? Well, let us see what the averages are as disclosed by these tables. I find upon calculation that the average gross profit realized by these twenty-five druggists was 38 2/3 per cent. The average expense, on the other hand, was 24½ per cent. My experience leads me to believe, after studying the statements of many other druggists beside those represented in this paper, that these averages are pretty nearly typical of what you will find the country over. I have often said, for instance, that the usual percentage expense was 25, and the usual gross profit from 35 to 40.

THE GOAL TO REACH.

I believe that every druggist ought to hold these average figures before him, and strive in every possible way to attain them. If his percentage of expense runs very much beyond 25, including his own salary, he is spending too

much money somewhere and he ought to begin retrenchment. If his percentage of profit falls much below 35 or 38, he should begin an earnest investigation of the facts. Of course, if a man is located in a city where the prices are lower, he may find it pretty difficult to make a gross profit exceeding 32 or 34 per cent, but in such localities there is an opportunity for him to increase his volume of business so that he can cut down his ratio of expense. A net profit of less than 10 per cent certainly betrays wretchedly poor management, and the figure ought to be as near 15 as possible. Fifteen per cent should be the goal for every druggist in the country. And why, indeed, shouldn't he attain it since 14 is apparently the general average? He ought to be able to take his annual volume of sales, calculate 15 per cent of this amount as the net profits, add to the result his own salary as proprietor, and thus obtain the estimated total income which his business should be made to yield him.

When you talk like this to the ordinary druggist, he replies, however, that all these things sound very well when uttered by word of mouth, but that it is a very different matter to apply them in fact. He argues that you can't change the conditions of your business very materially, and that every merchant is the creature of circumstances. This is all tommy-rot. More than once I have seen a business radically changed in profit-making character within a year or two as soon as the owner of it realized that a change was necessary. *"Realized that a change was necessary"*—that's the point! The average druggist doesn't know what profit he is making on his goods. He is selling a lot of things below actual cost, when the expense of doing business is considered, and he doesn't realize it. Once let him wake up and he will begin to correct the situation very fast.

SOME REASONS FOR FAILURE.

It isn't the purpose of this paper, however, to show in detail how druggists delude themselves about the question of profit, nor is it my intention to indicate how things may be improved. These considerations I have discussed elsewhere in other papers and addresses. I may say, however, that four or five vital mistakes are made by perhaps a majority of druggists. Some of them keep no business records at all and have no idea about their profits and expenses. Others do make a fist at it, but fall into the common error of basing their percentage of profit on the sales, which is right, but in practice applying it on the cost, thus losing money very frequently under the astonishing delusion that they are making it. Still others fail to include a salary for themselves among their expenses, and thus believe themselves to have a very low percentage expense and to be making money with great rapidity. Others again lose two or three hundred dollars a year by failing to take advantage of their cash discounts, or falsify their profit records by failing to take inventories, while there is another group of men who own their store buildings, charge themselves no rent in the expense account, and thus get nothing in the way of interest on their money. In this and in other ways druggists are frequently ignorant of what the actual facts are about their incomes, or, if not really ignorant, are greatly deluded.

Very often, if druggists only knew it, they are selling patent medicines and even candy and cigars at a very low profit—if, indeed, they make anything at all on them. It is frequently true, of course, that these things cannot be thrown out even if they fail to be profit-makers, but if the druggist finds by actual, close knowledge of his business that he has a large percentage of goods in stock which yield him a low profit, and which pull down his general average of gross profit to a small figure, then his duty is plain—he should boost up profits on other lines, put in new things which yield handsome returns, reduce his expenses, and strive in every way possible to make the figures at the end of the year what they ought to be. Knowledge is power. Once let a druggist know that he is not doing as well as he thinks he is and he will get himself out of trouble. The great difficulty often is to make him realize that he is living in a fool's paradise.

"MY BEST PAYING SIDE-LINE."

The Seventh of a Series of Important Articles—Making a Success of Electrical Goods—What Stock to Carry—Where to Obtain Supplies—How to Push the Line.

By JACOB LUSTIG,
Cleveland, Ohio.

One of my best side-lines and one which pays me a very nice profit is electrical goods. I refer to lamps and various electrical devices. As electricity is being used more and more each day the need for such appliances becomes

Jacob Lustig.

more apparent. The druggist stands a very good chance of getting this trade for the reason that his store is open day and night. He is in a position to supply these articles, especially the lamps, when the hardware or electrical stores are closed.

STARTING IN.

The stock that one handles need not be very large at the start—especially if one is near the jobber. A good opening order would include the following items: ½ dozen 8-candlepower carbon lamps; 1 dozen 16-candlepower lamps; ¼ dozen hylo lamps; ½ dozen 25-watt tungsten lamps; 1 dozen 40-watt tungsten; ½ dozen 60-watt tungsten; ¼ dozen 100-watt tungsten; ¼ dozen electrical irons; 1 6-inch disc stove; 1 nursery milk warmer; 1 toaster stove; 1 curling-iron heater and 1 heating pad, the latter an improvement on the hot-water bottle.

This would make a very good selection at an outlay of about $50. Most any electrical jobber would be willing to quote prices, and in case there were no such jobbers near one could deal direct with the factories—the Westinghouse or General Electric. The retail prices on these articles are mostly fixed, thereby insuring the dealer against cut prices and a net profit of from 20 to 25 per cent. I handle the

One page of a folder on electrical supplies distributed by Mr. Lustig.

Westinghouse line through a jobber, the Enterprise Electric Construction Co., 5307 Euclid Avenue, Cleveland, Ohio. I don't know of any jobbers in other cities who deal in these goods, but I am sure if one were to go to any local electrical concern he could make some suitable arrangements. In case there is no

jobber in a town, one can communicate with the Westinghouse Electric Mfg. Co., Pittsburg. Pa., or the General Electric Co., Schenectady, N. Y. They will gladly give any information desired on the subject.

PUSHING THE LINE.

To push the sales I had a lamp rack made and connected it up with electricity, which displays each style of lamp. When the rack is placed in the back of the window with the devices arranged in front, it makes quite a display. Electricity in the home being comparatively new, such a trim always draws people to the window and creates comment, especially at night when the rack is aglow with light. Then, too, personal talks to one's customers help quite a bit. Mention such articles as lamps, toasters, irons, and heating pads for home use and also as gifts on birthdays and holidays, or card-party prizes.

One could advertise these various articles in the newspaper. I distribute a leaflet regularly to the homes. I am sure that the druggist who puts in this side-line and gives it the proper amount of attention in the way of displays, advertising, and talks will have little cause for regret. The goods are clean and easy to handle. They do not occupy much space and the profits are good.

THE LEGISLATIVE SITUATION IN PHARMACY.

The Whole Field of National and State Legislation is Considered in Detail, Principles for Incorporation in All Pharmacy Acts are Suggested, and a Legislative Conference Representing All Branches of the Trade is Earnestly Recommended.

By JOHN C. WALLACE.*

It has been a matter of keen regret to me that some action was not taken on the recommendation of Henry P. Hynson, made at the Boston meeting last year as Chairman of the

John C. Wallace.

Committee on Legislation, in regard to the formation of "The Legislative Conference of the American Pharmaceutical Association," in order that it might be used as a clearing house in matters pertaining to legislation for the different branches of the drug business, all of which are affiliated with the A. Ph. A.

When we take up the study of the pharmacy and pure drug laws, and come to a realization of the wonderfully diversified ideas incorporated therein, we will come to the conclusion that a clearing house is badly needed.

THE THREE OBJECTS.

All pharmaceutical legislation has had and will continue to have three fundamental aims in view—the advancement of pharmacy as a profession, the protection of the pharmacist, and, of equal if not greater importance, the protection of the people. Fortunately these three things are so closely allied that laws affecting or benefiting one are apt to have the same result upon another. New features of course arise each year as new conditions are encountered.

The one necessity which stands foremost to my mind is that of passing laws which will meet the conditions and give protection, *and still not be too drastic.* This sounds like the impossible, and I confess the solution is beyond me and I think I may safely say beyond any one man. Satisfactory and practical phar-

*Address of the Chairman of the Section on Education and Legislation of the American Pharmaceutical Association, delivered at the Denver meeting last month.

macy laws (I mean laws which are satisfactory to the majority, for there are too many interests affected for them to be satisfactory to all) are the result of months and often years of work and study on the part of men realizing their need and far-reaching importance, and looking at the question from every side.

The problems are very much the same throughout the various States. The laws enacted show clearly what these problems have been and how met. A comparison of the various legislative measures of these States on subjects now most before the public makes them stand out more forcibly than anything I could say on this subject. I shall make a brief tabulation along this line later.

Some of the States are making rapid advancement in pharmaceutical legislation. Others have laws which do not seem to be adequate for present conditions. The druggists, however, are doubtless not satisfied with them themselves, and regard them as a stepping-stone. Any one having experience along this line appreciates fully the difficulty of obtaining what you want, especially when a radical change or advance is contemplated. It takes time and gradual progress to bring the desired result. Through all the ages, advancement along any line or in any profession has had to contend with "The old was good for my father and for me; why change?"

It has been said by one of our most distinguished statesmen that legislation is universally a case of compromise; we therefore cannot wonder at the diversified character of legislation found upon our statute books.

AS TO NATIONAL LEGISLATION.

That there was abundant need of such legislation as the Federal food and drugs act will not be denied, for the benefits accruing from it are discernible upon every hand. Many articles which were formerly offered as pure food have been entirely eliminated, and those of us who have been actively engaged in the practice of pharmacy realize the advantages of the law not only to us, but to the whole people. Few will dispute the fact that the food and drugs act has been successful in performing a very important mission, but experience has taught us that it should go still farther, and there is at this time undoubtedly a need for its being amended, as there is also a need for other national legislation upon lines which seem to us to be very important.

That there should be a remedy for the false, extravagant, and misleading claims made for the many worthless preparations with which the country is flooded, is almost unanimously conceded. I am of the opinion that all patent or proprietary preparations should be manufactured by or under the supervision of one who has been thoroughly trained and qualified for the purpose.

Twelve of the States have already adopted the single standard, and I see no reason why a single standard should not be established under the law for preparations for which a formula is given in the authorities recognized by the act. As to crude drugs and chemicals, the label should explicitly state in unmistakable terms wherein they differ from the official standard, so that any one purchasing them would know exactly what they were buying.

The exclusion of wood alcohol from preparations for external use only is not in my judgment justified.

There is an absolute necessity for a national law which will give a complete record of all sales of habit-forming drugs in interstate commerce, so that they can be transmitted to those having the enforcement of the State narcotic laws, since intrastate regulation loses much of its effect without interstate regulation. And this can be done without levying any additional tribute on the trade, by enacting a law requiring registration of all sales of narcotic or habit-forming drugs, or preparations containing more than a maximum amount of them, made in interstate commerce, and reporting the same monthly to a central bureau in the Department at Washington, the latter to furnish monthly a copy of the record of all sales or shipments of such drugs or preparations into a State, to the authorities having the enforcement of the narcotic laws in that particular State.

Every State in the union has enacted a pharmacy law, and all of these laws were originally founded upon the same lines. Many of them have been constantly amended, and many need still further amendments. The enforcement of all of them is entrusted to the boards of pharmacy. I deem it unnecessary at this time to take up these laws separately and classify the different conditions relating thereto as it would be almost an endless task. I will, however, a little later, cite a number of principles which I think should be incorporated in them.

Since the enactment of the Federal laws 44 States of the Union have enacted food and drug laws, and in these various measures wonderfully diversified opinions as they relate to pharmaceutical legislation are made manifest, and for the purpose of illustrating this I have scheduled a number of the features of the State laws.

STATE PURE DRUG LAWS: WHO ENFORCE THEM?

Board of Pharmacy: Delaware, Illinois, Iowa, Massachusetts, New York, Pennsylvania, Virginia. Total, 7.

Board of Health: California, Colorado, Indiana, Kansas, Louisiana, Montana, New Hampshire, New Jersey, Vermont. Total, 9.

Food and Dairy Commissioner: Michigan, Missouri, Ohio, South Dakota, Texas, Washington. Total, 6.

Department or Commission of Agriculture: Florida, Georgia, North Carolina. Total, 3.

Agricultural Experiment Station: Nevada, North Dakota. Total, 2.

Commissioner of Agriculture and Industries: Alabama.

Dairy Commissioner and Director Agricultural Experiment Station: Connecticut.

Dairy, Food and Sanitary Inspector: Idaho.

Dairy, Food and Drug Commissioner: Nebraska.

Commissioner under Board of Health: Maryland.

Director Agricultural Experiment Station: Maine.

Commissioner of Health: Oklahoma.

Commissions: Arkansas, by State treasurer, Secretary of Agriculture, Mines and Manufacturers, and Secretary of State; Kentucky, by Director Agricultural Experimental Station and one member from State Medical and State Pharmaceutical Associations; Rhode Island, by Board of Food and Drug Commissioners; South Carolina, by Board of Health and one druggist; Tennessee, by Food and Drug Inspector; West Virginia, by Agricultural Department and County Prosecuting Attorneys; Wyoming, by Dairy, Food, and Oil Commissioner.

STATE PURE DRUG LAWS: HOW THEY DIFFER.

Only five of the States of the Union have enacted pure drug laws, viz., Arizona, Minnesota, Mississippi, New Mexico, and Oregon. Wisconsin has a pure drug law that relates only to flavoring agents, and specifically sets forth a standard for each one.

Twelve of the States have adopted a single standard for all official preparations. They are Colorado, Delaware, Florida, Idaho, Illinois, Kansas, Louisiana, New York, Ohio, South Carolina, Texas, and West Virginia.

Five of the States have a restricted standard, and Maryland permits of variations same as the Federal law, except the preparations of opium, from which no variation is permitted.

New Jersey permits no variation from the official standard of the official preparations of opium, camphor, ginger, peppermint, and iodine.

Pennsylvania permits of no variation from the official standard of the official preparations of opium, iodine, peppermint, ginger, camphor, and ethyl nitrite.

Tennessee provides that no tincture of iron or preparation of opium, iodine, camphor, ginger or peppermint, as defined in the U. S. P. or N. F., shall in strength differ from the standards therein laid down.

Virginia permits of variations same as the Federal law except with reference to laudanum, which must conform strictly to the standard in every way; other official preparations of opium may differ from standard as to amount and strength of alcohol only, but the facts must be plainly stated on the label.

Seventeen of the States, Alabama, Arkansas, Colorado, Florida, Georgia, Iowa, Kentucky, Michigan, New York, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, and West Virginia, exempt prescriptions of U. S. P. and N. F. preparations from the labeling clause.

Two of the States, Nebraska and New Jersey, exempt prescriptions, recipes, U. S. P. and N. F. preparations from the labeling clause.

Nine of the States, California, Idaho, Indiana, Kansas, Louisiana, Maine, Maryland, Missouri, and North Dakota, exempt prescriptions from the labeling clause but require all U. S. P. and N. F. preparations to be labeled.

Connecticut and Tennessee exempt prescriptions and U. S. P. preparations from the labeling clause.

Virginia exempts prescriptions and U. S. P. and N. F. preparations, provided they are of official standard.

Montana exempt prescriptions and extemporaneous preparations dispensed by druggists.

Oklahoma exempts prescriptions, and the alcohol content is not required, but aside from the alcohol content U. S. P. and N. F. preparations are not exempt.

Delaware does not require the ingredients to be stated on the label and makes no provision for misbranding.

Nevada makes no provision for a statement of any of the so-called interdicted articles to be made upon the label.

New Hampshire, Texas, Washington, and Wyoming require prescriptions and U. S. P. and N. F. preparations to bear labels mentioning all of the interdicted articles. Texas, however, does not require a statement as to alcohol content.

COMPARISON OF STATE ANTI-NARCOTIC LAWS.

Thirty-seven of the States, Alabama, Arkansas, Colorado, Connecticut, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Utah, Virginia, Washington, and West Virginia, prohibit the sale of cocaine except on prescriptions. California permits the sale of cocaine in preparations that do not contain more than one grain to the ounce.

The District of Columbia permits the sale of cocaine in preparations that do not contain more than ¼ grain to the ounce.

Idaho and Wisconsin permit the sale of preparations that contain not more than ⅛ grain to the ounce.

Rhode Island and Texas permit the sale of preparations of cocaine that do not contain more than 1/16 grain to the ounce.

Seven of the States prohibit the sale of opium or its derivatives or preparations, except on the prescription of a physician. They are Florida, Indiana, Kansas, Michigan, New Jersey, Oregon, and South Dakota.

Rhode Island permits the sale of preparations containing not more than six grains of opium to the ounce.

Georgia and West Virginia permit the sale of preparations that contain not more than 4 grains of opium to the ounce.

Massachusetts permits the sale of preparations that contain not more than 2½ grains of opium to the ounce.

Alabama, Arkansas, California, the District of Columbia, Idaho, Louisiana, Maryland, Montana, New Mexico, New York outside of the City of New York, North Carolina, Texas, Virginia, Washington, Wisconsin, and South Carolina, sixteen States in all, permit the sale of preparations containing not more than 2 grains of opium to the ounce.

GRADUATION PREREQUISITE LAWS.

But three States in the Union have inscribed upon their statute books a graduation prerequisite law—New York, Pennsylvania, and Rhode Island.

A graduation prerequisite law has been under discussion by a number of State pharmaceutical associations, but in some quarters has met with much opposition. Those who are opposed to the idea want to compromise the proposition by making the requirement that it should be graduation from a recognized school of pharmacy or *an equivalent of education* to be determined by the board of pharmacy.

In the first place I know of no way in which a pharmaceutical education, equivalent to that required for graduation from a reputable college of pharmacy, can be obtained—except from such a college.

In the second place, boards of pharmacy cannot or at least do not give sufficient time in their examinations to ascertain if the applicants have the equivalent of graduation.

Third, the requirement of graduation from a recognized school of pharmacy, to my mind, removes to a great extent the question of politics from the board of pharmacy, and leaves no loophole for an applicant without the requisite qualifications, but with a strong political affiliation and influence, to become a registered pharmacist.

During the enactment of the graduation prerequisite law in Pennsylvania, I had the honor of being chairman of the Committee on Legislation of the Pennsylvania Pharmaceutical Association, and many curious ideas and objections were encountered, one of which was the plea that we were placing a barrier upon the poor boy who was ambitious to become a registered pharmacist. I am fully convinced, however, that any young man who is honest, industrious, intelligent, and ambitious can become a graduate of any reputable college of pharmacy in the United States without being an object of charity from any one.

PRINCIPLES TO INCORPORATE IN STATE PHARMACY LAWS.

As to the suggestion of principles which I think should be incorporated in a pharmacy law, I submit the following:

That all laws relating to pharmacists should be executed by pharmacists.

That a store remote from a pharmacy should be licensed to sell drugs and medicines in original packages, put up by or under the supervision of a pharmacist, and properly labeled with dose and directions.

That a pharmacy should be licensed and the license renewed annually, a charge being made for the original license and for each renewal. The applicant for this license and for each renewal should state in his application the location of the pharmacy, the name or names of the person, firm or corporation owning or conducting the same, and the names of all persons and employees engaged in the conduct of or carrying on of the store who are registered as pharmacists or assistant pharmacists, with the number and date of their certificates of competency and qualification. This license should entitle the holder thereof to own or conduct a pharmacy at the place only for which it is issued. Same can be transferred in the name only of the holder, and without charge.

That pharmacists and assistant pharmacists be licensed, the licenses to be renewed annually without charge.

That each applicant for examination and registration should be subjected to preliminary examination, the equivalent of at least a completed first year in a high school.

The students of pharmacy should be registered and should have a preliminary education which would entitle them to make application for examination and registration as assistant pharmacists after having had the required amount of experience.

That any license to practice should be refused, suspended or revoked for good and sufficient reasons, same to be stated in the act, but not without notice and a hearing.

That all certificates and all licenses should be conspicuously exhibited in the place of business, or where the licensed pharmacist or assistant pharmacist is employed.

That a license should be used only by the person to whom it is issued, and no license should be used to conduct more than one pharmacy or one licensed store.

That provision should be made for the right of interchange of certificates with other States having equivalent requirements.

That it should be a misdemeanor to impersonate an applicant who should be applying either for a certificate or for a license.

That all rules and regulations made by the board should be approved by the Attorney-General.

That drugs administered or dispensed by physicians should conform to the standard of strength, quality, and purity fixed by the laws of the Commonwealth.

That no person should use the title "pharmacist" or "assistant pharmacist" except when so licensed, or that of "pharmacy" or "licensed store" except when holding a license.

That every pharmacy should have a copy each of the latest editions of the U. S. P. and National Formulary.

That the authorized agents of the board should have the right to enter any place where drugs are compounded, dispensed or sold, for the purpose of purchasing samples, and should have the right to purchase samples in order that tests may be made.

That all drugs offered for sale at retail should be plainly labeled.

That the sale of poisons should be restricted, and the registration clause be strictly enforced.

That all physicians' prescriptions compounded and dispensed should be filed by the pharmacist and kept for a reasonable period, to be stated in the act, and during that period should be open to inspection by the police authorities upon presentation of an order from the court or from members of the board of pharmacy.

That when a physician indicates in writing that a prescription is not to be renewed, it should be a misdemeanor to either renew it or to give a copy of the same.

A LEGISLATIVE CONFERENCE RECOMMENDED.

There doubtless are many other principles which should be incorporated, and which a conference would bring out. In conclusion, I have but one recommendation to make, and that is to repeat the recommendation made at the Boston meeting by Dr. Hynson, as Chairman of the Legislative Committee, that a National Legislative Conference be established under the auspices of the American Pharmaceutical Association.

A RAZOR WINDOW.

By H. A. DORR,
Sapulpa, Oklahoma.

This display was especially devoted to safety razors. It extended from the floor of the window to the top, so that every person walking by was bound to see it. On the floor arranged in semicircles were cartons of the razors, while several packages were also attached to the wall of the trim. The background consisted of white oilcloth, which served to show up the cartons well and lend a sharp outline to the pictures.

Mr. Dorr's razor window.

In the center may be seen an elderly gentleman who has shavel half of his face with the Gem razor. Written across his chest is the phrase, "Well, that is fine." The price appears distinctly on the shaving stand together with a statement of guarantee. Both cartons and signs were furnished by the Gem Cutlery Co., of Chicago, Ill. One placard bears the caption "shave and save," and goes on to show in figures the economy effected by shaving oneself. Blades are also quoted, the price being 7 to 35 cents.

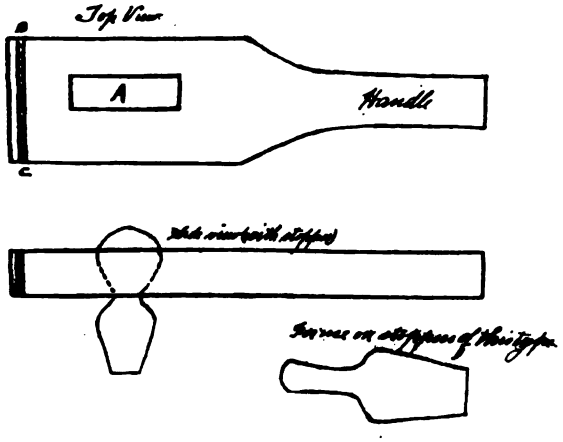
Across the top of the trim appeared the sign "Diamond Drug Co." This was made of cardboard. I did the work myself and must say that it showed up very well. The diamond shape, of course, helped to impress the firm name on the observer.

I ran this display two weeks altogether, but I made a few changes in that time for the reason that a contest was on for the best window display. This trim certainly sold many Gem razors for us, and this is what windows are for—to sell goods.

DOLLAR IDEAS

IMPLEMENT FOR LOOSENING GLASS STOPPERS.

Wm. Burton Spire, Washington, D. C.: Take a piece of wood about six to eight inches long and, using a chisel, cut a hole (A in the accompanying illustration) the size of the top of stoppers found in five-pint acid bottles. One end can be made into a handle, and a band of metal or wire can be placed about the other end (B to C) to prevent the wood



from splitting when force is applied. I have found this very useful.

The device can be used only on the kind of stoppers illustrated in the diagram. By placing the implement over the top of the stopper (as shown in the drawing, side view) and forcing the stopper to turn, the disastrous results often obtained by heating the neck of the bottle or by striking the stopper may be avoided. It is especially applicable in removing stoppers from five-pint acid bottles.

PREVENTING LOSS OF SALES DUE TO SHORTAGES.

Daisy A. Frick, Audubon, Iowa: I keep a record on the back sheets of the want-book of all sales lost, entering the name of the article and its price. The aggregate loss of sales in a month's time may surprise you as it did me. The next step is to ascertain the cause and then hasten to apply a remedy. If you are not entering items on your want-list with close attention, get yourself and your clerks in line. If there is a repeating demand for other articles for which you can't take a special order, get the business by stocking the goods regularly.

TO HOLD A FUNNEL STEADY.

Stewart T. McGee, South Berkeley, Cal.: Often while filtering a liquid the funnel will tilt. The liquid runs over and must be filtered a second time. To avoid this trouble remove the top and bottom from a round can, leaving

the can proper in the form of a cylinder. Place this "steadier" over the bottle shoulder, insert the funnel, and the latter will not tilt. Asphaltum varnish makes a good dust-proof coating for the tin. For a five-gallon bottle a seven-pound chloroform can makes a holder just right for a half-gallon funnel.

FITTING A LARGE CORK IN A SMALL BOTTLE.

E. J. Hall, Jackson, Miss.: When necessary, a large cork may be made to fit a small bottle if treated as shown in the accompanying sketch. Two wedge-shaped sections are cut

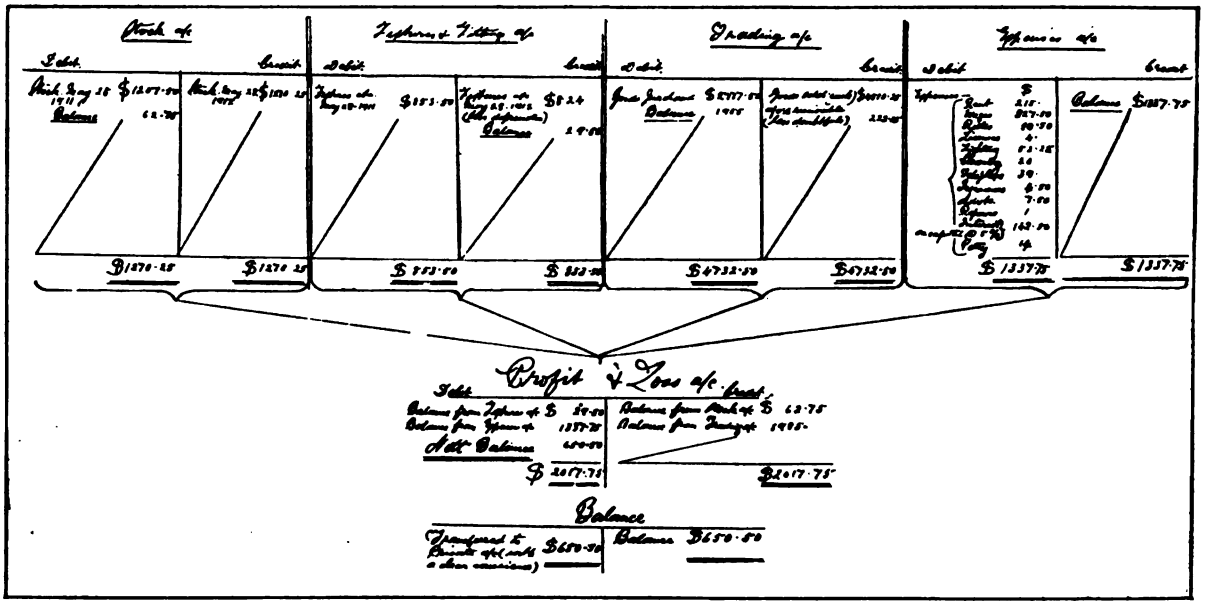
from the stopper at right angles to each other (see Fig. 1). The points are squeezed together as in Fig. 2, and the end inserted in the bottle as is illustrated in Fig. 3. Wet the cork slightly and the whole operation will be easier.

PROFITS AND EARNINGS

WHAT A SCOTTISH PHARMACIST EARNS.

A "chemist" in Glasgow, Scotland, sent us the business statement which we have reproduced in facsimile on this page, and writes the following letter of explanation:

"As a British reader and admirer of the BULLETIN, I take an interest in the financial statements which your subscribers often send for your criticism. Frankly, I may say that I have some difficulty in following them, as all the figures are in one column and it is to me a little confusing.



"I am enclosing the result of this year's stock-taking in my branch store, and have tried (somewhat clumsily, I am afraid) to set it out in as clear a manner as I can. It is perhaps all wrong from the accountant's point of view, but it discloses quite clearly to myself the precise amount of cash which I can take out of the business with safety. It may be of interest to your readers as coming from this side, and your criticisms will be of interest to me.

"I get my stock figures from the inventory after pricing on a very strict basis, checking and taking 5 per cent of depreciation off everything but proprietaries—or 'patent medicines,' as we call them. Fixtures, fittings, and utensils have had about 40 dollars lopped off, and 30 dollars have been allowed for probable bad debts. 'Insurances' include fire, plate glass, and workmen's compensation. A charge of 5 per cent is made under 'Expenses' for interest on capital. The business is four years old. Last year the profit on the same basis was 550 dollars.

"I advertise very little as I have a good window and the district is a growing one.

"Wishing yourself and the 'Bright one' all good things, I am, dear sir, yours truly, ——."

We leave our readers to form their own opinions of this interesting statement, making no comment ourselves beyond hazarding the remark that a net profit of $650 on a branch-store investment of less than twice that sum, and on sales of about $4700, is certainly excellent from an American point of view.

A SEMI-ANNUAL STATEMENT ANALYZED.

An Iowa store which began business January 1 invoiced at $6721. Finding it more convenient to make the fiscal year begin on July 1, the stock was again invoiced at that time and showed a footing of $7029. Both amounts given include the fixtures.

Cash sales during the 6 months	$7699 00
Net purchases	5823 00
Freight	117 00
Expenses	1143 00
Salary of proprietor (not drawn out)	1200 00
Proprietor drew out	387 00
Cash on deposit July 1	675 00
Book accounts July 1 (good)	2025 00
Indebtedness (Jan. 1 and July 1)	448 00

The cash sales during the six months were $7699. To this add the book accounts, $2025, and the total sales amount to $9724.

The net purchases were $5823, the freight $117, which together equal $5943, the total cost of the goods purchased. But the stock increased from $6721 to $7029 in six months, or $308. Therefore, subtracting $308 from $5943, we find the cost of goods actually sold was $5635. Subtracting $5635 from the sales,

$9724, the gross profit amounted to $4089. Dividing the profit by the sales, we find the percentage of gross profit was 42.05, a very good showing.

Having determined the gross profit, $4089, we have only to subtract the expenses, $1143, to learn the net profit, which is $2946. But we still have to subtract from $2946 the proprietor's salary of $1200, which should have been drawn out, and which finally gives us $1746 as the net profit. Dividing $1746 by the sales, $9724, we find the real percentage of net profit is 17.95, a very high figure.

Let us see what the percentage of expense amounted to. Adding to the expenses given, namely, $1143, the proprietor's salary of $1200, we find the total expenses were $2343. This divided by the sales, $9724, gives 24.09 per cent. This is a low percentage of expense, which explains the large net profit.

In these figures we have ignored the item of $387 which the proprietor actually drew out, assuming that it was part of the $1200 due him for his salary. JNO. H.

LETTERS

A NEW ZEALAND STORE ARRANGEMENT.

To the Editors:

In the BULLETIN for April, 1912, on page 146, I notice a druggist photographed in his store—Mr. William Bodemann of Chicago.

Well, looking at the interior, it did not strike me as having a particularly smart arrangement. The containers were apparently two or three deep and therefore an impediment to quick dispensing.

I submit an interior view of my dispensing room. I've been established here seven months and have had plenty to do in rearranging the "pickle" left by my predecessor, who evidently thought dirt and grease admirable adjuncts in the pharmacy. Dirt of any sort is a horror to me. My arrangement in back of the dispensing screen now makes for quick work and quick cleaning.

Looking at the photograph, the two top shelves in the center have not yet been rehabilitated, although cleaned. One object is symmetry of arrangement. When I started to set out the screen, the shelves were so far apart as to lose much space. So I set to work and put in shelves at the top of the 10-ounce bottles, not quite half the width of main shelves. On these I put my small bottles, which are always in the way if they stand on the same shelf as the larger bottles.

The counter I keep clear of all containers,

A view of Mr. King's dispensing room.

only scales being in evidence. On the section alongside the scales I set each container used in making up prescriptions so that the ingredients may be checked and the bottles then restored to their proper places.

Pahiatua, New Zealand. RALPH V. KING.

THREE GOOD SIDE-LINES.

To the Editors:

Druggists have to spread into side-lines. I find that souvenir post-cards pay very well, better than anything else in the store. You can take local pictures yourself and have them made up into photographic cards. These sell very well. Besides we have birthday and holiday cards. I buy cards in quantity, and they net me from 100 to 500 per cent profit. One must have as big a variety as possible and select subjects that are more or less seasonable the year round.

Graphophones are also very profitable, particularly in the fall and winter. Every one loves music. If you have a good line of records, people will listen to the pieces you play for your own pastime, and this often leads to the sale of a graphophone. I was surprised at the number I sold in two months. The first cost is small considering that it means a customer for new records each month. This line pays very well—about 40 per cent.

Then in the summer I handle fishing tackle. Every fisherman knows that when he starts to buy there is no end. Fishing tackle pays very well—from 100 to 1000 per cent. Make an attractive window with everything used in fishing, and you can sell every fisherman an outfit. Offer a prize for the biggest catch or biggest fish caught and brought to your store, and you will have success in the sale of fishing tackle.

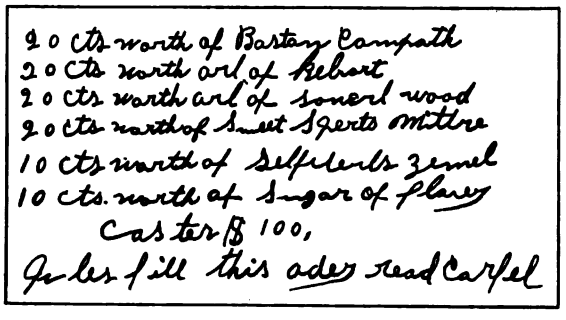
E. E. SCHAEFER.

Fairport Harbor, Ohio.

A PUZZLER DECIPHERED.

To the Editors:

The July BULLETIN has come to hand and is thoroughly alive and interesting. I have examined the badly written order on page 298. Really, it is not nearly so badly written as badly spelled:



We would have filled it as follows:

20 cents worth of balsam copaiba.
20 cents worth of oil of cubeb.
20 cents worth of oil of sandalwood.
20 cents worth of sweet spirit of nitre.
10 cents worth of sulphate of zinc.
10 cents worth of sugar of lead.

Cost, $1.00.

Please fill this order. Read carefully.

In our experience we have filled many more difficult orders than the foregoing. This combination is one in which several ingredients are suggested by the one or two which are easily read. The real puzzlers are those orders calling for one or more articles not connected by similar uses. We have received such orders as follows, all badly spelled and looking much worse than when we reproduce them in print:

1 oz. Pantasote for babby.
One half once of pulse of tello.

Somerset, Ohio. BAILEY & FINCK.

[NOTE BY THE EDITORS.—Among others who deciphered this prescription are the Hahman Drug Company of Santa Rosa, Cal., and F. Loughran of Fishkill-on-Hudson, New York. For reasons of space, we are unable to publish their letters in addition to the foregoing.]

A POINT OF ETIQUETTE.

To the Editors:

In your department of "Business Hints," on page 302 of the July BULLETIN, is an article by L. C. Wareham borrowed from *The Pill*, showing very forcibly the advisability of avoiding the expression "Is that all?" in talking to a customer. In our store all are instructed to ask a customer either, "Is there anything else you think of?" or "Do you have anything else in mind?" Either of these questions usually sets the customer to thinking, and in most instances proves worth while.

Pottstown, Pa. E. E. WILKINS.

A FRIEND FOR 14 YEARS!

To the Editors:

As for me I take pleasure in saying that I have read the BULLETIN for the past fourteen years and have eleven or twelve years' volumes in bound form. The latter I use constantly as reference books and general drug-store helps. Your formulas are a great help in making individual items, while your department of "Profits and Earnings" shows that most of us fail to get the good sound business system in the drug business that is necessary in any mercantile line of its magnitude and complications. Thanking you for your good service, I beg to remain,

O. MITCHELL.

Pecos, Texas.

STATIONERY A GOOD SIDE-LINE.

To the Editors:

My best paying side-line is stationery. I try to keep a clean stock, which includes tablets and envelopes to match, box papeteries, bulk paper, and invitation notes.

We carry a small lot of cheap papers, but the bulk of the stock is in the better goods, selling for 50 and 75 cents. These are our most staple sellers, as are the 10- and 25-cent tablets. Our best customers are women.

We often have samples of talcum powder, perfumes, and toilet preparations, which we hand out while making a stationery sale and thereby gain patronage on these articles also.

Audubon, Iowa. D. A. FRICK.

A VETERINARY MIXTURE.

To the Editors:

On page 531 of the August BULLETIN, in the department of Queries (which, by the way, I think one of the best features of the BULLETIN), I notice the inquiry of W. H. B. about a veterinary mixture:

Mercury,
Nitric acid,
Oil of cedar,
Tincture of cantharides, equal parts.

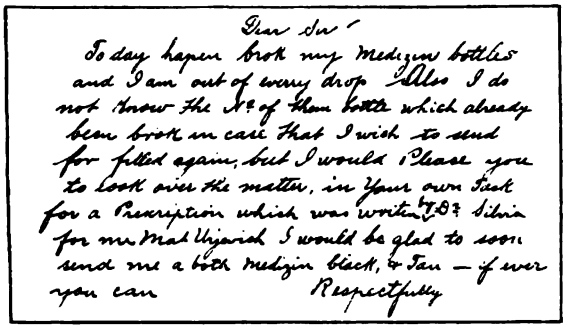
I believe this is similar to one we put up a great deal. We use powdered cantharides instead of the tincture, and we add a small amount of vaselin. We dissolve the mercury in the acid, add the oil of cedar to the powdered cantharides, use a little vaselin, and mix. If the acid solution is still hot, the mixture will swell. RALPH E. GRAY, Ph.G.

Effingham, Kansas.

"BLACK AND TAN!"

To the Editors:

Here is something new in the way of a letter or order from a customer. What do you know about "black and tan" for a remedy?


Dear Sir
To day hapen brok my Medicine bottles and I am out of every drop I Have I do not know the No of them bottle which already been brok in case that I wish to send for filled again, but I would Please you to look over the matter, in Your own Book for a Prescription which was written for Silvia for me Mad Uriarch I would be glad to soon send me a both medicin Black & Tan — if ever you can Respectfully

Oakland, California. CARSON ANGEL.

QUASSIA CHIPS OR POKER CHIPS?

To the Editors:

In the July BULLETIN I noticed in Brother Farrington's article that he had at one time in his experience had a call for "poker chips for lice on cattle," but he says he never found out what the customer wanted. I think he would have been safe in supplying "quassia chips," as I have calls for them for that purpose. Customers sometimes pronounce the name so one would think they were calling for "poker chips." G. E. BRASINGTON.

Maiden Rock, Wis.

A QUESTION OF PRICE.

To the Editors:

The following prescription was filled by my predecessor for 35 cents. I charged 45 cents, and the customer, being very much displeased, claimed that several druggists had said a quarter was a good price for it:

Sulphonal .....1 drachm.

Divide into five powders.

I would like very much to have the opinion of other druggists about this price.

Detroit, Mich. R. E. DALES.

[NOTE BY THE EDITORS.—We should like to have our readers express themselves on the price of this prescription.]

IN HARD STRAITS!

To the Editors:

A negro came into the store a few days ago to buy a hot-water bottle for another negro who was ruptured. He said, "I wants dis fo' a nigger out heah. He's corrupted and the corruption is done come down on him!"

Klondike, Texas. BENTON JONES,
Mgr., Klondike Pharmacy.

To the Editors:

Enclosed find check for another year's subscription to the BULLETIN. May it continue to show a marked advance in pharmaceutical journalism considerably ahead of similar publications! R. H. NEEDHAM, PH.C.

Fort Worth, Texas.

* * *

To the Editors:

Cannot afford to be without the BULLETIN. It becomes more interesting every year.

Pasadena, Cal. THOS. M. JAMES.

* * *

To the Editors:

We think the BULLETIN is the best paper on earth and cannot get along without it.

Ord, Nebraska. BERANCK BROS.

* * *

To the Editors:

We consider it impossible to run a drug store without the BULLETIN OF PHARMACY.

THE STRONG DRUG CO., LTD.

Haileybury, Ont.

THE SODA FOUNTAIN.

SOME PLAIN SYRUPS.

How to make good simple syrup: Take 7 gallons of water, add 50 pounds of sugar, and stir with a paddle until the sugar is dissolved. It requires but two or three minutes to do this, and it is a much more satisfactory method than to use a percolator—you get the benefit of every grain of sugar. This will give 10 gallons of simple syrup at a cost of 30 cents a gallon, figuring sugar at six cents a pound. One of the reasons why simple syrup should not be made heavier is that a light syrup brings out the fruit flavors; for instance, in orange syrup. Almost every soda dispenser, who takes any interest in his work, has overheard this remark from the customers:

"The sodas at this fountain would be all right if they were not so sweet."

An orange or any other phosphate or plain drink should have a delicious fruit flavor, but what do you get in most places? The sole trouble lies with the simple syrup. Suppose you put four lumps of sugar into your cup of coffee. What will be the result? You will have a sickishly sweet coffee, which very few people will like. Put only two lumps in the coffee and you have a delicious cup of coffee in which the flavor of the bean predominates. Same here—if the syrup is made as above stated, you serve an elegant orange phosphate, with a very fine fruit flavor, and it will not be too sweet. The same is true of all the other flavors.

Before using this simple syrup it should always be run through a very fine straining cloth, and care should be taken that the tank is cleaned out whenever empty.

To make a perfect lemonade, powdered sugar may be used to advantage. Room and time may not allow this, in which case a simple syrup may be made—10 pounds of sugar to one gallon of water—and substituted.

Many soda-fountain operators pay very little attention to simple syrup, but judging from my own experience it is of very great importance in the manufacture of good syrups.

CHOCOLATE SYRUP.

Chocolate syrup is a most important factor at the soda fountain. It is called for more than any other flavor, and the popularity of the fountain depends to a great extent on whether the chocolate syrup is good or indifferent. First of all in making chocolate syrup a good cocoa must be employed. I do not care to advertise any of the many brands of this article, but there are a number of good ones on the market. I generally use two different brands, half and half. The mixture stands me about 35 cents to the pound.

There are various ways of making chocolate syrup, of which the following seems to me, for many reasons, to be the best:

Take the cocoa and mix as much as possible with the sugar. Put the mixture into the boiling water and let it come to a good boil. Do not turn off the gas when it comes up, but allow to boil for two or three minutes. In fact, give the mixture a thorough "boil," otherwise you will be wondering why the people don't like your chocolate, even if you use the very best ingredients. Doesn't a ripe apple taste better than a green one?

A very good formula is the following:

One pound of cocoa, six pounds of sugar, and one gallon of water. This will make about 1½ gallons of syrup at a cost of 53 cents a gallon, figuring cocoa at 35 cents and sugar at six cents a pound. If you use two ounces of this to a soda, it will cost about one cent, and you have a very good syrup for reasonable money. Some dispensers also add a little vanilla extract, which will make it more expensive, and rather spoil the wholesome chocolate flavor.

If possible this syrup should be kept in bottles, but where much of it is used cans may be employed to advantage. It should never be used until at least twenty-four hours old and thoroughly cooled. It will keep better in an ice-box than in any other place. The tanks or bottles on the fountain for chocolate syrup should be washed out every night before closing. This will keep the chocolate syrup fresh and clean. Finally, be sure the syrup is strained well before it reaches the fountain.

For sundaes you can make this same syrup double strength, making it a point, of course, to see that it is poured on the cream ice cold.

VANILLA SYRUP.

Vanilla syrup also has a big "call," and nothing but the best vanilla extract should be used. In the end it is the most inexpensive of all. Supposing you pay $9 a gallon for a good vanilla extract. How much does a gallon of vanilla syrup stand you? If you use one ounce of vanilla, which will cost 14 cents, and one gallon of simple syrup at 30 cents, it will cost just 44 cents for a gallon or 128 ounces. Two ounces of this will cost less than one cent.

If you use a cheap vanilla you only hurt your own business! Enough profit can be made on a good one. A good vanilla will not require coloring.

COFFEE SYRUP.

To make a coffee syrup take one pound of good coffee, place in a percolator, and add a pint of cold water. Let stand for about five hours, then add 2½ gallons of boiling water and again let stand for from six to twelve hours. Drain off the percolate and add from 2½ to 3½ pounds of sugar, warming a little in order to dissolve the sugar. Strain and allow to cool before using. This process will make about three quarts of syrup at a cost of 44 cents or 60 cents a gallon.

Another method which I have employed very successfully is as follows:

Take three ounces of prepared coffee, which dissolves instantly in either cold or hot water, three quarts of water, and from 3½ to 4½ pounds of sugar. Mix the coffee first with one quart of cold water, then add two quarts more of water and sugar and stir until the sugar is dissolved.

The above has met with great success at our fountain, and more of it is sold every day.

In order to have good syrups close attention must be paid to them. Tanks and bottles should be kept clean, syrups kept fresh, and old syrups should never be mixed with the new. If you are the proprietor, you will naturally look out for your own interest, but if you are a soda dispenser, see that the boss makes a little money.

Anybody can make good syrups, etc., for big money, but the question is to make good syrups at the smallest cost compatible with real economy.—*The Soda Fountain.*

HOT WEATHER HINTS.

Just at this time of the year your fountain business is at its height, and if the drinks and sundaes you have been serving have given you any kind of a reputation you are making money. Just now every one wants something cool and refreshing, and as a result the rush is on. Every one is working hard, and the tendency is to become negligent and think that anything will do. It is so easy to try to rush things through, to stretch things just a little more so as to save time. For example, perhaps you have been using a dozen lemons to make a gallon of lemon syrup; being rushed you use only eight. The result is the syrup is not as good as usual; but you argue that it is hot weather and that it will pass because people will drink anyway in this kind of weather. Now in a sense this is true, the public will put up with your neglect because it is hot, and they want something cold to drink; but it is having an adverse effect upon your reputation all this time, for while they may eat and drink your product, they are not satisfied. They may not say anything. The dispenser excuses the soft ice cream that he puts in the glass of soda water by saying that it has just been frozen; we sold all out yesterday. Any one is willing to take this explanation once or twice, but when they hear it every day or two they think, and rightly, that you are neglectful.

To keep people coming to your fountain is to satisfy them when they do come. They are coming now in crowds. You can have everything right and fresh. There is no excuse for having old syrups. You say "we can't do things as well as we do when we are not busy, because we are rushed and every one is working overtime to turn out enough syrup, etc., to supply the demand." That is just where the trouble lies; so many confectioners and other dispensers of soda water, by the way, are just as bad—never think of hiring extra help so that things can be properly managed at this season. An extra man, even a boy at eight or ten dollars a week, will be a big help in keeping things up to your standard. If there is ever a time when good service counts, it is at this season of the year. It's a bad habit to let the boys become careless in the busy season.

There is no season of the year when your fountain can make as many friends as it can in the summer. There is a good reason for this; more people come to it then than at any other time. If the fall of the year does not find you with more regular customers coming to your fountain than you had in the spring, then the season has been a failure, no matter how much money you have put into the bank. Making money is a good thing, that's what we are in business for; but one must look beyond to-day into the future. There are other seasons coming. If you do things just as they should be done you may make a little less this year; but you will make more next season, and so on. It is better to begin with a little and grow than with much, and each year find that you are doing less as the years go by.—*The International Confectioner.*

SODA WATER WINDOW DISPLAYS.

EGG DRINK WINDOW.

An especially effective show can be arranged by banking the back and floor of the window with clean wheat straw, the back sheaves held erect in place by Alice blue ribbons, which color is most effective with the yellow straw. Leave several nests of the straw and fill with large white Leghorn eggs. Make several imitation egg drinks by filling the body of the glass with yellow jewelers' cotton and the top with white cotton to represent froth. Stand these dummy drinks on small boxes covered with straw, and on the floor between these place a number of small Japanese chickens. Perch a small crowing rooster on the rim of the central glass and hang up a good-sized sign, "There are no chickens in our egg drinks." There is no exhibit that attracts as much attention as a live exhibit, and if you can get a few new-hatched downy little chicks to run about in the show window it will be much more effective.

CHOCOLATE WINDOW.

Get from your principal chocolate man some chocolate pods showing the way the bean grows. Suspend these by red ribbons from the top of the window. Get some of the cocoa beans, both raw and roasted, also some of the shells, then the cracked beans before grinding; a cake of chocolate, and finally the finished cocoa, and a cake or two of cacao butter, the by-product in the process of manufacturing cocoa. Spill all these things in neat piles on a red plush or sateen covering on the window floor. Tag each pile with a neat descriptive sign and bank the back of the window with red fall foliage, and you have a window that every one will admire and remember. On a pedestal in the center place a glass three-fourths filled with brown jewelers' cotton and one-fourth white cotton, and an attractive sign with brown lettering, "The way our chocolate soda is made and why it is so good."

THE VANILLA WINDOW.

A vanilla window can be arranged in the same way, showing the whole and ground beans, the sugar, and the extract.

GRAPE JUICE WINDOW.

A corking good idea appeared in a window in Boston. The window was dressed with imitation grapevines, on which were tied with green-covered millinery wire a number of bunches of grapes. In the center of the window were a small cider press and a stool. Twice a day a young lady dressed in white went into the window, cut off the bunches of grapes, picked the grapes from the stem into the cloth of the press, and pressed the juice out. This operation took about three hours, as it was conducted slowly, and then the window was covered in order to tie on more grapes. There was a large sign, "This is the way we prepare our grape juice at our fountain. Try it. Also for sale in bottles."

CIDER WINDOW.

A fresh cider window can be arranged and worked in the same way, using imitation apple branches and apples instead of grapes, and adding to the equipment a small apple grinder.—*Confectioners' Journal.*

BOOKS

"Fresh Air and How to Use It." By Thomas Spees Carrington, M.D., New York, the National Association for the Study and Prevention of Tuberculosis, 105 East 22d Street; 250 pp.; 150 illustrations; Cloth; Price, $1.00 post-paid.

Although fresh air is the most fundamental of all the necessaries of life, few people know how to use this free gift to the best interests of their own health and that of those with whom they live and work. Dr. Carrington aims in his book to show how an abundance of fresh air is within the reach of every one, whether he be a millionaire owner of a country house, or a dweller in a city tenement. Probably no more complete compendium of information on how to get fresh air in the home at all times has ever been published.

The aim of the book is not primarily to suggest methods of treating disease in the open air, though it is published by the National Association for the Study and Prevention of Tuberculosis. It is rather a handbook for every one who wishes to ward off disease in his own body and in those of the other members of his family.

Dr. Carrington's method of treating the subject is practical. He aims to be so concise that any one may be able to follow out his instructions in securing or making the devices of which he speaks. Some of the topics which he discusses are window tents, home-made and manufactured; roof bungalows, with suggestions for building; temporary fresh-air porches for country use; wall houses and iron frame porches for city use; tents and tent houses; open air bungalows and cottages; roof playgrounds for children; and clothing, bedding, and furniture necessary for outdoor living and sleeping.

The book contains 150 illustrations, including floor plans and working drawings. It is published as cheaply as possible by the National Association for the Study and Prevention of Tuberculosis as part of its campaign for the prevention of disease.

Ibsen as a Druggist.

"Shortly before his sixteenth birthday, Ibsen was apprenticed to an apothecary by the name of Reimann, at the little town of Grimstad, between Arendal and Christiansand, on the extreme southeast corner of the Norwegian coast. This was his home for more than five years; here he became a poet, and here the peculiar color and tone of his temperament were developd. So far as the genius of a very great man is influenced by his surroundings, and by his physical condition in those surroundings, it was the atmosphere of Grimstad and of its drug store which molded the character of Ibsen. Skien and his father's house dropped from him like an old suit of clothes. He left his parents, whom he scarcely knew, the town which he hated, the schoolmates and schoolmasters to whom he seemed a surly dunce. We find him next with an apron round his middle and a pestle in his hand, pounding drugs in a little apothecary shop in Grimstad. What *Blackwood's* so basely insinuated of Keats—'Back to the shop, Mr. John—stick to plasters, pills and ointment boxes'—inappropriate to the author of *Endymion*, was strictly true of the author of Peer Gynt."—"The Life of Henrik Ibsen," by Edmund Gosse.

"An Essay on Hasheesh," written by Victor Robinson, has just been printed in cloth by the Medical Review of Reviews, 206 Broadway, New York City. It is a little book of 83 pages, and the price is 50 cents. The history of cannabis and its employment is first given, and then a somewhat dramatic and picturesque account is presented of the results following the administration of the drug to the author himself and to a friend.

CAPSULES OF SCIENCE

Prepared by Prof. W. L. Scoville.

Pungent Paragraphs.—

The green flame which surrounds an arc light is said to be due to a reaction between nitrogen oxides and ozone, induced by the electrical conditions.

The gasoline engine demands conditions of lubrication which castor oil can best fulfil, and only a good grade of the oil is suitable for this purpose.

An improved method of clarifying olive oil consists in mixing the crude oil with a solution of sodium chloride, and after some time separating in centrifugals. Oil so treated is lighter in color and purer than that obtained by older methods.

To preserve solutions of apomorphine hydrochloride Corbelli recommends to add one per cent of hypophosphorous acid. This preserves the activity for at least one year, although the color changes.

Pure water will dissolve small amounts of iron, zinc, copper, tin, nickel, and lead, forming colloidal solutions of these metals. These solutions are easily precipitated by electrolytes, and are not formed in waters containing such.

Italian chemists have obtained evidence that sodium salicylate and caffeine combine to form compounds of definite character. The work is not yet finished, but will soon show whether the pharmaceutical product is a compound or only a mixture.

The International Committee on Weights and Measures recommends that standard weights for laboratories be made of tantalum. It resists all acids except hydrofluoric, and is sufficiently hard and permanent for standards.

Sunlight is rich enough at the earth's surface in ultraviolet rays to decompose water into hydrogen and hydrogen peroxide.

Digestion depends upon the presence of inorganic salts as well as upon enzymes. If gastric or pancreatic juice be dialyzed, the enzyme loses its power, but on the addition of salts the activity is restored.

An Italian chemist says that tomatoes are a good remedy for diarrhea. They are frequently supposed to have an opposite action.

Tincture of iodine applied externally is said to prevent the coloring of the urine by methylene blue, taken internally.

Eloire, a French chemist, claims that it is impossible

to recognize with certainty an addition to butter of less than 30 per cent of oleomargarine.

Phosphoric acid is stated to modify nutrition to an extent to be objectionable in acid drinks. It acts quite differently from citric or tartaric acids on the system.

Water can exist in the solid form in five allotropic conditions, all of which except ordinary ice are heavier than water.

T. H. Laby figures that if the interior of the earth contains as much radium as the surface rocks, the temperature of the earth should now be 14,000° instead of what it is.

Neon lamps, in which neon is rendered incandescent by an electric current, promise to be the most economical form of lighting. They give an orange-colored light which is useless for matching colors.

Chemical light rays have an injurious effect on all enzymes, though in varying degrees. Emulsin is easily destroyed, while rennet is quite resistant. The action is due in part to the formation of hydrogen peroxide by the rays.

Schumburg says that the bacteria-destroying power of absolute alcohol is as great as a 1:1000 solution of mercuric chloride. A 70-per-cent alcohol is more effective because it causes less coagulation.

If cumarin be introduced into the soil, it causes distortion of the leaves of the plant growing therein. Vanillin inhibits root-growth and benzoquinone produces tall, slender plants.

Siloxide, a solution of titanium or zirconium oxide in quartz, makes an extremely resistant form of glass which is valuable for chemical uses. It resists the action of hot alkalies as well as of acids and does not break or bend easily with heat. It is being manufactured in Germany.

Lobster shells are found to contain alizarin, and when boiled this forms a red "lake" similar to "Turkey-red," which is the cause of the change in color when lobsters are boiled.

Arsenic Externally.—

Dr. Washburn states that arsenic acid has a stimulating action on the skin, due partially to its being reduced to arsenous acid and liberating free oxygen. When the action is slow and in moderate quantity, the growth of hair and epithelium is stimulated, but if too rapid or too long continued the nutritive processes of the cells are hurried beyond endurance, and exhaustion and finally death of the tissues follow. He warns against the indiscriminate use of arsenic.

Infusion of Digitalis.—

A. Hoger claims that none of the preparations of digitalis is as efficacious as the infusion because none other contains all of the active principles of the leaf. The infusion does not keep well, which is its greatest objection, but the addition of 5 to 15 per cent of alcohol remedies this. Five per cent of alcohol will preserve it ten to thirty days, and 15 per cent will preserve it indefinitely.

A Lawn Dressing.—

J. W. Tayleur gives the following formula for a lawn sand: Sand 67 pounds, sulphate of ammonia 7 pounds, nitrate of soda 7 pounds, superphosphate 21 pounds, sulphate of potassium 7 pounds, sulphate of iron 3 pounds. Apply in the spring at the rate of 5 pounds to 40 square yards of lawn. The sulphate of iron weakens or kills dandelions, and the sulphate of ammonium is harmful to plantain, both being harmless to grass.

Gout is Expensive.—

Radium emanations decompose uric acid and urates into ammonia and carbon dioxide. This explains the action of certain thermal springs on gouty patients, and also the influence of radium treatments on such patients. The uric acid is first rendered soluble, and may be eliminated before being decomposed.

A Group of Michigan Travelers.—These are some of the members of the Michigan Pharmaceutical Travelers' Association, snapped at the Muskegon meeting last month. This is the meeting where the Michigan State Pharmaceutical Association and the Michigan Retail Druggists' Association amalgamated to form a new body under the title of the first-named organization. The president of the Travelers' Association is F. W. Kerr, Detroit, Mich., and the secretary-treasurer is W. S. Lawton, Dr. Miles Medical Company, Elkhart, Indiana.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Phosphorus Rat Pastes.

J. W. L.—There are many stupid formulas for phosphorus paste, yet there is, perhaps, nothing so easy to make as an active and fatal paste with the phosphorus in a practically unoxidized state. The points to note are that phosphorus readily dissolves in hot fats (1-20 or more), and that the poison should not be present in such excessive quantity as to drive away the vermin.

(1)
Phosphorus .....1 drachm.
Beef dripping.....5 ounces.
Wheat-flour .....2 ounces.
Sugar .....1 ounce.
Powdered biscuit .....1 ounce.
Water .....a sufficiency.

Melt the dripping and put it into a wide-mouth bottle, placed in a pan of hot water. Drop in the phosphorus (cut small), cork, and shake the bottle until the phosphorus is dissoved (dipping into the hot water occasionally). Place the powders in a warm mortar and pour the phosphorized dripping upon them, mix, and add warm water to make a soft paste.

(2)
Phosphorus .....1 drachm.
Pure carbon bisulphide.....½ ounce.
Beef dripping .....5 ounces.
Comp. tragacanth powder.....½ ounce.
Oil of anise.....10 drops.
Oil of peppermint.....5 drops.
Boiling water.....3 ounces.

Heat the dripping until it is quite clear, and transfer to a hot mortar; pour into this the carbon bisulphide in which the phosphorus has been dissolved; stir, then add the two powders and the oils, and finally the boiling water all at once, kneading the mass thoroughly until a perfect mixture is obtained.

These are practically alike, but by dissolving the phosphorus in the carbon bisulphide the paste is made much more quickly. The carbon bisulphide must be the redistilled or odorless variety. Most of the bisulphide is dissipated by the hot water, and, as the solvent evaporates, access of air, therefore oxidation of phosphorus, is prevented. Another good way to make the paste is to melt lard in a wide-mouth bottle in a water-bath; introduce into it ½ ounce of phosphorus for every pound of lard; then add a pint of proof spirit; cork the bottle firmly, keeping the contents heated to 150° F., and agitate smartly until the phosphorus becomes uniformly diffused, forming a milky-looking liquid. This liquid on cooling affords a white compound of phosphorus and lard, from which the spirit spontaneously separates, and may be poured off to be used again, as it only serves to diffuse the phosphorus in very fine particles through the lard. This phosphorized lard, on being warmed very gently, may be poured into a mixture of its own weight of barley or wheaten meal and sugar, incorporated therewith, and after flavoring with oil of rhodium, etc., the dough may be made into pellets for distribution to the mice. Or mix the lard with powdered cheese (3 to 1), to be spread on bread.

Two Queries.

N. S. wants to know what he can do with syrup of wild cherry which on standing has turned sour and shows fermentation. He also asks how the following prescription may be dispensed:

Carbolic acid.....1 minim.
Guaiacol carbonate.....7½ grains.
Mix and make 25 capsules.

This formed a semi-liquid, and when N. S. tried to liquefy it entirely in a test-tube by the application of heat, and then waited until it was sufficiently cool to pour into the capsules, it solidified entirely.

From the text of our querist's letter it is not plain to us whether he wants to recover some syrup of wild cherry which has spoiled, or whether he wants to know how to prevent future lots from going wrong. If the former, there is no help for it—throw the stuff in the sink. If the latter, we might suggest a few don'ts:

Don't keep this syrup in a warm place in summer.

Don't mix an old lot of syrup with a new lot.

Don't fill the stock bottles, from which you have just emptied the last of the old lot, with the new syrup until the bottle has been thoroughly washed with hot water. The presence of a very small amount of badly fermented syrup is sufficient to ruin the most carefully made preparation in a very short time.

Don't cut down the amount of sugar, for thin syrups afford excellent media for the growth of microscopic organisms.

Don't use heat to dissolve the sugar.

Don't, under any circumstances, forget to add the glycerin to the receiving vessel.

As for the prescription of capsules, this can be prepared by mixing the guaiacol carbonate with one and a half times its weight of milk sugar and then adding the carbolic acid, which has been previously liquefied by warming. Do not, however, use a liquefied acid containing any added substance such as glycerin or water.

Regarding Concentrated Solution of Hydriodic Acid.

"Druggist" writes as follows: "I have in stock a bottle of concentrated solution of hydriodic acid. Some time ago I used part of it, and shortly after when I again looked at the bottle I noticed it had turned a dark orange color. I took it off the shelf, opened it, and could smell the free iodine. Thinking it unfit for further use, I placed it off in the corner of the prescription case, intending to more thoroughly investigate it when I had some spare time. After several days, when I again looked at it, I was surprised to see that its contents were now a light straw color with no trace of free iodine. I placed the bottle back on the shelf where I originally kept it. This is near a window where the light strikes it during the day. I did this to see whether the light would again turn it dark, but after several weeks and at the present time I find that it is perfectly colorless and clear. Do you think it is O K. and all right to use for preparing syrup hydriodic acid?"

Concentrated solution of hydriodic acid is readily decomposed by sunlight with a liberation of iodine. It is necessary to preserve it with hypophosphorous acid, which reacts with the iodine present and again converts it to hydriodic acid, thus keeping the solution practically colorless. We are unable to explain the coloration of this sample, however, unless it had stood in direct

sunlight, which would decompose it faster than the hypophosphorous acid would decolorize it. After standing in the dark cupboard for a few days the hypophosphorous acid may again have caught up with its work. We would not hesitate to recommend that the solution is entirely fit for the preparation of syrup of hydriodic acid.

Toilet Lotion.

H. B. S. writes: "Please publish the formula of a pure white cream lotion for the hands and face. A liquid preparation of a non-greasy order is preferable."

On page 125 of the March BULLETIN, 1911, appeared the following formula by R. L. Dixon:

Quince seed	2 ounces.
Boracic acid	1 ounce.
Rose-water	8 ounces.
Distilled extract of witch-hazel	8 ounces.
Glycerin	8 ounces.
Alcohol	8 ounces.
Tincture of benzoin	1 ounce.
Oil of rose	20 minims.
Carbolic acid	20 minims.
Water, enough to make	1 gallon.

Place the quince seed in a gallon bottle, add the water and let stand 24 hours, shaking occasionally. Strain through muslin. Dissolve the carbolic and boric acids in the glycerin with the aid of gentle heat. With this mix the tincture of benzoin, and add this mixture in several portions to the quince-seed mucilage, agitating the bottle well after each addition. Finally add the oil of rose dissolved in the alcohol, and mix the whole well.

This makes a nice, creamy, non-sticky preparation. It is put up in 3-ounce bottles and retails at 25 cents. Wash the quince seed well before macerating.

Commenting on the foregoing formula, on page 213 of the May BULLETIN, 1911, D. A. Frick said: "I have prepared a toilet lotion of quince seed, witch-hazel, etc., very similar to the formula given by R. L. Dixon, and have enjoyed a nice sale on it for several years. I color it violet and use a violet-trimmed label, naming the preparation 'Violet Cream Lotion.'"

Some Business Questions.

W. M. C. writes us the following letter: "How much net profit should be realized from an investment of $6800 and an annual business of $14,000? The expense is about $3000, equaling approximately 22 per cent. Can a business be done with this small expense? Please let me know what you think about these figures in general."

An expense of 22 per cent for a $14,000 business is rather below the average, although it is entirely possible. It should be known definitely, however, whether the proprietor's salary has been added, as it should be, to the expense column. The salary in a business of this size would be something like $1200 or $1500, and it would seem to us that the remaining portion of the total expense of $3000 would scarcely be sufficient to run the business. We are therefore inclined to think that the element of proprietor's salary has not been taken into consideration, and the fact ought to be known definitely. As to how much net profit should be realized from the business we may reply that the average profit is about 10 per cent, meaning $1400 in this case. Adding to this amount the proprietor's salary of $1200 or $1500, we have total earnings from the business ranging between $2500 and $3000. This is as much as could be expected on the average, although in some instances shrewd managers are able to jack up their net profits to 12 or 14 per cent.

Shoe Polishes.

L.'s Pharmacy.—The following, borrowed from Henley's Book of Recipes, evidently result in liquid polishes or cleaners:

(1) Yellow wax	4 ounces.
Pearlash	4 drachms.
Yellow soap	1 drachm.
Spirit of turpentine	7 ounces.
Phosphine (aniline)	4 grains.
Alcohol	4 drachms.
Water, a sufficient quantity.	

Scrape the wax fine and add it, together with the ash and soap, to 12 ounces of water. Boil all together until a smooth, creamy mass is obtained; remove the heat and add the turpentine and the aniline (previously dissolved in the alcohol). Mix thoroughly, and add sufficient water to bring the finished product up to 1½ pints.

(2) Water	18 parts.
Rosin oil	4½ parts.
Spirit of sal ammoniac, concentrated	1 1-5 parts.
White grain soap	1.93 parts.
Russian glue	1.59 parts.
Brown rock candy	0.57 part.
Bismarck brown	0.07 part.

Boil all the ingredients together, excepting the pigment; after all has been dissolved, add the Bismarck brown and filter. The dressing is applied with a sponge.

These are for tan and russet shoes. For a black polish you might color with some such dye as "Frankfort Black" or Ivory Black instead of the brown dyes.

Marketing a Proprietary Preparation.

Mr. F. writes: "I have a formula for an ointment for eczema, ringworm, and all kinds of skin diseases. I have cured, to stay cured for good, in the last three years, about 75 cases. I would like to know the best way to put this product on the market."

If you desire only a local trade, push the preparation in your own store. Advertise it in your paper. Induce other druggists in the county about you to carry it, and place a stock with the home jobbers. Thus you can start in a small way and gradually expand.

If you have big ambitions, get in touch with some advertising houses that are practiced in national advertising. They know better than ourselves how to proceed. But it must be remembered that any attempt to give your preparation wide publicity will call for large expenditures. It requires capital. Plenty of fortunes have been sunk in the exploitation of patent medicines.

Hand Lotion for Farmers and Others.

J. P. M.—The formula to which you refer is probably that which appeared on page 80 of our book entitled "350 Dollar Ideas for Druggists." This is the formula of a good antiseptic skin lotion to be used on the chapped and cracked hands of laborers, farmers, mechanics, and miners. Their hands are usually so callous that the ordinary toilet creams do not soften and heal them. The following formula makes an excellent application for burns, stings, and all irritations where a cooling, healing, antiseptic lotion is indicated. It is also useful as an after-shave.

Boric acid	2 drachms.
Salicylic acid	4 drachms.
Zinc sulphocarbolate	30 grains.
Menthol	10 grains.
Spirit of camphor	2 fluidounces.
Glycerin	4 fluidounces.
Spirit lavender compound	½ fluidounce.
Bay rum, q. s.	16 fluidounces.

This preparation may be put up under any appropriate name in 4-ounce packages, which retail at 25 cents. This price gives the retailer a good profit and pleases the consumer.

Artificial Flavors.

A. C. W. wants a formula for two artificial flavors, strawberry and banana.

Artificial flavors are tabooed by the Federal law. Several of the States also prohibit their use. With that understanding we print the following formulas:

STRAWBERRY.

Glycerin	½ parts.
Nitric ether	1 part.
Ethyl acetate	5 parts.
Ethyl formiate	1 part.
Ethyl butyrate	5 parts.
Methyl salicylate	1 part.
Amyl acetate	3 parts.
Amyl butyrate	2 parts.

BANANA.

(1)	Deodorized alcohol	500 parts.
	Proof spirits	200 parts.
	Pure banana juice	190 parts.
	Banana ether	100 parts.
	Tincture of vanilla	10 parts.

Color with tincture of curcuma.

(2)	Acetate of amyl	1 ounce.
	Valerianate of ethyl	1 drachm.
	Diluted alcohol	15 ounces.
(3)	Amyl acetate	4 drachms.
	Alcohol	10 ounces.
	Water, enough to make	16 ounces.

Some add butyric ether, which, however, is of questionable utility.

Tasteless Preparation of Cod-liver Oil Compound.

"Pharmaceutical" asks for a formula for a tasteless preparation of cod-liver oil "extract" containing fluidextract of wild cherry, extract of malt, and hypophosphites of lime and soda, manganese, quinine, and strychnine. We suggest the following, borrowed from the second edition of the Standard Formulary:

Morrhuol (or gaduol)	64 grains.
Fluidextract wild cherry	2 fluidounces.
Fluidextract licorice	3 fluidounces.
Glycerin	1 fluidounce.
Simple syrup	1 fluidounce.
Extract of malt	6 fluidounces.
Compound syrup of hypophosphites with iron and manganese	3 fluidounces.
Fullers' earth, powdered, q. s.	240 grains.
Caramel	q. s.

Mix the morrhuol with the glycerin, and triturate with the fullers' earth. Add the fluidextracts, syrup, and malt, shake, let stand for a day, agitating occasionally. Filter, and to the filtrate add the syrup of hypophosphites and the caramel.

The foregoing will possibly answer the requirements if the U. S. P. syrup of hypophosphites compound be employed. It may precipitate on standing, however, and it would be advisable to reduce the quantity of syrup of hypophosphites about one-half.

To Prevent Eye-glasses from Steaming.

O. B.—The following paste has been used for this purpose:

Potassium oleate	2 ounces.
Glycerin	1 ounce.
Oil of turpentine	1 drachm.

Soft soap may be used, instead of the potassium oleate, though the results are not as satisfactory. Melt the oleate and glycerin together on a water-bath; then add the turpentine. Should the paste be too thick, it may be thinned by the addition of more glycerin.

Restoring Automobile Tires.

J. R. M. writes: "Will you please publish in your next issue a formula for a paint or some sort of a coating which applied to automobile tires makes them look like new?"

The preparations used for renovating tires vary all the way from a quick-drying paint to a benzole solution of rubber. To the rubber solution may be added some white pigment such as lead or zinc oxide.

Cleaning Wall-paper.

O. B.—Here are three methods of cleaning wall-paper. They have appeared before in the BULLETIN:

(1) To remove all stains or marks, where people have rested their heads, from wall-papers, mix pipeclay with water to the consistency of cream, lay it on the spot, and allow it to remain until the following day, when it may be easily removed with a penknife or brush.

(2) If not very dirty, the paper of any room will be much improved by brushing it over in straight lines with a soft broom covered with a clean, soft cloth; if, however, the paper be much soiled, very stale bread is the best thing to clean it with.

(3) The following has been recommended: Mix together 1 pound each of rye flour and white flour into a dough, which is partialy cooked and the crust removed. To this 1 ounce common salt and ½ ounce of powdered naphthaline are added, and finally 1 ounce of corn-meal and ½ ounce of burnt umber. The composition is formed into a mass of the proper size to be grasped in the hand, and in use should be drawn in one direction over the surface to be cleaned.

Fly Powders.

R. C. P.—We do not know the composition of the proprietary powder which you mention, but the following formulas are said to drive away flies:

(1) Powdered long pepper, 5 parts; powdered quassia, 5 parts; powdered sugar, 10 parts; alcohol, 68 per cent, 4 parts. Mix the powders, moisten with the alcohol, dry, and powder again. Keep well stoppered. For use, a little is placed in a saucer and set where the flies are most abundant.

(2) Eucalyptol, 1 part; powdered orris root, 4 parts; powdered starch, 15 parts. Dispense in sprinkler-top tin boxes.

(3) Eucalyptol, 5 parts; chalk, 10 parts; starch, 85 parts. Mix. To use, cover the hands, head, and other exposed parts. The flies will not come near them.

Hot Water Removes Mucilage.

E. O. S. is in trouble. He writes: "Some time ago I pasted a display on my plate-glass window with mucilage. When I tried to remove the display the adhesive would not come off. Will you kindly tell me what will remove it without injury to the window?"

Try warm water. Mucilage is made with gum and should be water soluble. You might add a little ammonia water or sodium carbonate to the water used for cleansing.

Dyeing Shaving Brushes.

E. D. Co.—This subject is rather outside of our scope, and we could only theorize about it in a way which wouldn't serve any practical use. We suggest that you address your inquiry to some such source as the *Scientific American,* which is published in New York City.

A Book Wanted.

H. R. C.—"Food and Drug Adulteration" is a book written by Dr. Harvey W. Wiley. The publishers are P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, and the price is $4.00 net.

Journals on the Wool Industry.

L. C. S.—Two journals devoted to the wool industry are: "The American Sheep-Breeder and Wool-Grower," Chicago, Ill., and the "Angora Goat-Breeders' Journal," Portland, Oregon.

E. D. Co.—We are unfortunately not able to give you a formula for the proprietary preparation mentioned.

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THE MONTH'S HISTORY

OWNERSHIP OF STORES BY LAYMEN.

A paper read by George C. Diekman before the New York State Pharmaceutical Association deserves more than passing attention. Dr. Diekman is both a member of the faculty of the New York College of Pharmacy and a member of the State Board of Pharmacy. In the latter capacity he has for years been brought closely in contact with the operation and enforcement of the pharmacy law, and in this particular paper he declared that the act had one serious defect. It did not preclude the ownership of a pharmacy by an unlicensed person, firm or corporation, provided such pharmacy be conducted in accordance with the provisions of the act.

This loophole, declared Dr. Diekman, had been taken advantage of by several classes of persons: first, by those who wanted to invest capital in a business which they thought very profitable; secondly, by others to provide a source of income for persons attending pharmacy schools; thirdly, by still others from motives of spite and revenge; and fourthly, by owners of buildings or their agents seeking a tenant for a vacant store. For one reason and another, therefore, a considerable number of stores have been established throughout the State which are not under the ownership and proper supervision of registered pharmacists, and which are really being conducted contrary to the plain intent of the law, and likewise contrary to the public welfare.

* * *

IS THERE A REMEDY?

Now what is the remedy? Professor Diekman declared frankly that he did not know. He rather leaned, however, toward the Massachusetts law which actually makes it a punishable offense for any one not a registered pharmacist to own or be actively engaged in the business of pharmacy, except that the widow, executor, or administrator of a deceased owner of a store may continue the business under the care of a registered pharmacist. He thinks it quite likely that such a law would be held unconstitutional; "but surely," he adds, "when a practice is so manifestly wrong in principle as the one under discussion is, and when it is at the same time manifestly detrimental to the best public policy and interest, there must be found some remedy which will make it impossible that such conditions any longer exist."

For ourselves, we are afraid that such a law surely would, if ever submitted to the test of court interpretation, be declared contrary to the fundamental constitution. Our understanding is that you cannot limit the ownership of property by law. If a man wants to invest in a drug store he has quite as much right to do it as he has to invest in railroad stocks or government bonds. The law can declare that a given type of business must be actually conducted by such and such persons, but it cannot very well have anything to say about the question of ownership. This is

sometimes unfortunate, and it may be regretful under the present conditions in New York State, but we do not see how it can be avoided.

* * *

PATENT MEDICINES IN ENGLAND.

A select committee of the House of Commons on patent medicines has been holding sessions for some time past in London. The purpose of the committee is to make a thorough investigation in reference to the law with regard to the sale and advertisement of patent medicines in the United Kingdom, and to make suggestions and recommendations—if deemed advisable to do so—with regard to changes that should be made.

In the course of the inquiry it was shown that even three years ago no fewer than 41,757,535 patent-medicine stamps were sold in the United Kingdom. This was practically equivalent to one package of patent medicine for every man, woman, and child in the country. The gross receipts from the sale of the stamps was £355,000 ($1,727,608). The receipts for the year ending March 25, 1912, was £327,856 ($1,595,510). It was estimated by one of the witnesses before the committee that the amount of money spent on proprietary medicines in Great Britain in the year 1908 was £2,500,000 ($12,166,250), which represented a sum sufficient to maintain 40,000 hospital or sanatorium beds.

Some time ago the British Medical Association suggested that when medicines are supplied otherwise than upon a medical, dental, or veterinary prescription the name and quantities of each of the constituents of such medicine should be plainly printed on the package, so that the label should constitute a guaranty of the contents of the package, and any false description, whether on the label or in any advertisement, should constitute an offense, and that the food and drugs act should be made to apply to proprietary medicines.

The committee is still hearing evidence, and its report will not be made public for some little time. Its recommendations are awaited with great interest, because of the very large use in the United Kingdom of patent medicines. In answer to a question put by the chairman of the committee, the solicitor to the customs and excise department stated that there was nothing, in his opinion, in the law as it now stands to prevent any person making up any sort of mixture containing anything except obvious poison, from advertising it as a cure for any disease, and selling it to the public on payment of the stamp duty. He added that probably the authorities could prosecute if absolute fraud were established, but that it would be exceedingly difficult, in his judgment, to obtain evidence that would insure a successful prosecution.

* * *

THE CANADIAN ASSOCIATION.

The Canadian Pharmaceutical Association held its fifth annual meeting not long ago in Vancouver. Inasmuch as this is a purely delegate body, it would seem that the attendance of 160, including the ladies, was quite gratifying. J. H. H. Jury of Bowmanville, Ontario, was elected president, and G. E. Gibbard of Toronto was reëlected secretary-treasurer. A number of important questions were discussed, and among other things it was recommended that an advertising campaign be conducted to promote the wider use of the Canadian Formulary, and that an appropriation be made for this purpose. The report of the special committee appointed to consider the advisability of undertaking the coöperative manufacture of a line of domestic remedies and toilet articles, finally recommended a scheme for adoption which carried no financial responsibility.

The latter step may possibly have been suggested as the result of the controversy between the Association and the National Drug and Chemical Company, Limited, manufacturers of the Na-Dru-Co line of products. It would appear that for a year or two the Association has been vigorously protesting against the action of the Na-Dru-Co people in furnishing supplies to general dealers as well as druggists. After the subject had been vigorously discussed at the Vancouver meeting, and after a defense had been read from the company, a resolution was finally passed "requesting the management of the company to refuse to sell Na-Dru-Co preparations to any dealer except a registered druggist in places where registered druggists are located." The resolution went on to declare that no line of goods not adopting this principle could be indorsed by the Association, and retail pharmacists throughout the Dominion were urged to support the Association in this attitude.

A paper on price regulation by Mr. Watters of Ottawa attracted a good deal of attention. Mr. Watters declared that the association stood

for jobbing prices on the $2.00, $4.00 and $8.00 basis, and that products not marketed in accordance with these figures should be discountenanced by druggists generally. Another form of price regulation came up when it was urged that the schedule of prices for general articles adopted at the Halifax meeting should be kept in mind by druggists throughout the country and should be lived up to by everybody concerned. It was declared under this head that whereas jobbing prices had advanced on many things, retailers were still selling their supplies at the same old figures.

* * *

PARCELS POST AT LAST!

At last, after many years of agitation, and despite the opposition of the N. A. R. D. and many other retail organizations, a parcels post law has been enacted by Congress. The measure, however, is not so objectionable to retailers as some of the earlier bills were, and the N. A. R. D., for instance, professes to be quite pleased with it. In any event parcels post legislation was bound to come, and it could not be prevented.

The new law, instead of providing for the flat postal rate to which we are accustomed with smaller packages, will provide for charges based on the length of haul. This is what is called the "zone" idea. Above four ounces rates will be paid by the pound or fraction, and they will vary with the distance as follows:

	First Pound.	Each Additional Pound.
Rural route and city delivery	.05	.01
50 mile zone	.05	.03
150 mile zone	.06	.04
300 mile zone	.07	.05
600 mile zone	.08	.06
1000 mile zone	.09	.07
1400 mile zone	.10	.09
1800 mile zone	.11	.10
Over 1800 miles	.12	.12

According to this system, mail-order houses located in a distant city will not be able to deliver goods by mail as cheaply as the druggist or other retailer who is located a few miles away from the customer. This gives merchants in the smaller towns throughout the country, who have always felt mail-order competition acutely, an opportunity to build up a mail-order trade themselves with the farmers and others on the rural routes in their vicinity. It is much to be feared that if dealers do not seize upon this opportunity during the early years of the operation of the law, they will awake later on to find that others have taken the business away from them.

According to the law practically all kinds of merchandise can now be mailed, including even products of the farm and garden, and the outside limit of weight is seven pounds and the maximum combined length and girth is 72 inches. Postage on all such packages shall be prepaid in the customary manner by affixing stamps especially printed for parcels. The Post-office Department at Washington has a lot of work to do in order to get ready for the transportation of parcels, but it is announced that the law will be in full operation by the first of January.

* * *

THE INTERNATIONAL CHEMISTS.

The International Congress of Applied Chemistry is a remarkable organization. This year's meeting was held in the United States, and it was the first time that the Congress had visited our shores. The sessions began in the city of Washington and ended in the city of New York. The work of the Congress is divided up into a bewildering number of sections, and the scope and variety of its activities are indicated when the statement is made that this year no fewer than 735 papers were read among twenty-four different sections. Another surprising fact is that while the total membership of the organization comprises about 4500 people, as many as 2173 were present at the meeting. Among the visitors were men of international prominence from countries all over the globe.

One of the sections of the Congress is devoted to pharmaceutical chemistry, and before this were read a number of papers on assay methods, plant chemistry, coloring substances, and the like. Among those from abroad who were interested in this section was John C. Umney, the president-elect of the British Pharmaceutical Conference.

Following the final adjournment in New York City, many of the members went on a tour of inspection throughout the country, visiting the leading industries in most of the prominent cities. A large party arrived in Detroit the 20th of last month, and a busy day was spent here. Automobiles were furnished by individual members in the drug and chemical trade, and the visitors were driven rapidly from one plant to another throughout the day. Along in the middle of the afternoon the

establishment of Parke, Davis & Company was reached, and here, after a trip of inspection had been made, a dinner was tendered by the house to its guests. Subsequently a chartered boat took the party up around Belle Isle, into Lake St. Clair, and finally landed the chemists at the railroad depot, whence they departed for the next city on their route.

* * *

A UNIQUE DINNER.

We have been at some unique dinners ourselves, but we have just been reading about one which certainly deserves the laurel wreath. It was tendered in San Francisco to President R. E. Miller, of the Owl Drug Co., upon his return from a tour of Europe and Egypt. Here is a description borrowed from the *Pacific Drug Review:*

> The fun began the moment the guests took their seats at the table and suddenly discovered that the chairs were all of the collapsible variety. Then, when all were seated again, this time more firmly, the center of the table opened mysteriously and a dainty miss appeared from the depths of Nowhere and welcomed Mr. Miller in behalf of his hosts. The table had been electrified so that it was impossible for one of the diners to pick up a knife or fork without receiving a mild shock. And suddenly darkness descended over all, thunders crashed, the lightning flashed, and in the midst of a driving snowstorm. of confetti fantastic goblins played pranks through the banquet hall. The wines were served in medicine bottles, and the cigars and matches were loaded with surprises, while even the loaves of bread when cut were found to be filled with wierd animals made from rubber.

This certainly was some dinner! We do not see, however, why the diners waited to get shocked until they picked up their knives and forks. The time to do that was when the "dainty miss" appeared.

* * *

A DRUG-CLERK INVASION?

The drug clerks in New York City seem to be worried. They have an organization there known as the National Pharmaceutical Society, and a meeting was called recently "to formulate a plan to fight the threatened invasion of clerks from Massachusetts and other States in New England." It would appear that " a certain lobbyist," whoever he is, has become active in the interests of a bill to establish interstate reciprocity of licenses between New York State and Massachusetts. Inasmuch as Massachusetts reciprocates with all of the other New England States, the N. P. S. feared that this would open up the fences all along the line. New York, you know, is one of the States which has the graduation prerequisite. A man may not become a registered pharmacist, and entitled to be the proprietor of a store, until he has been graduated from a reputable and recognized school of pharmacy. None of the New England States except Rhode Island has a similar law, and the clerks therefore feel that if reciprocity were established between New York and Massachusetts, the New York clerks would be subjected to unfair competition. We read that "the meeting concluded after five hours of speech-making and debate," but we do not know just what was done to avert the threatened inundation.

* * *

A POLITICAL SUGGESTION.

Henry Riechel, president of the newly consolidated Michigan State Pharmaceutical Association, has sent out an urgent appeal to members to see to it that proper candidates for the State legislature are first nominated at the primaries and subsequently elected. Mr. Riechel declares that at least two bills are scheduled to come up this winter in Lansing which will prove very embarrassing to retail druggists. One is a measure which would compel druggists in "wet" counties to restrict their sales of liquor to physicians' prescriptions, as has been the case for some years in "dry" counties. The other is a measure, said to be backed up by the saloon interests, which would impose a liquor tax upon druggists of $500. Mr. Riechel wants to see to it that a legislature is elected which will be hostile to both propositions, and he urges druggists throughout the State to interview candidates, find out where they stand, and vote for the right men. It is quite evident that the new organization in this State, resulting from the two preëxisting bodies, is going to interest itself very actively in legislative matters.

* * *

AGAIN!

Somebody introduced a resolution at the Denver meeting of the A. Ph. A. suggesting legislation to insure legible hand-writing in prescriptions. This "reform" bobs up every little while, and probably always will. We sympathize with druggists. We have been there ourselves—and we know what the conditions are. But all the same the idea of enacting any definite legislation is mere bosh. One

of our contemporaries, in discussing the Denver resolution, argues that inasmuch as this is the day of the typewriter and the adding machine, and since all correspondence and even much of the bookkeeping are done with these aids, there is no longer any excuse for the physician using the pen to write his prescriptions. But what about the doctor who, at the bedside of a patient at two o'clock in the morning, wants to write a prescription? Is he going to do it in the good old way, by holding a prescription pad on his knee, and using a pencil or fountain pen, or is he going to take a portable typewriter along with him in his left hand wherever he goes?

* * *

THE 50TH LIGGETT STORE. The fiftieth drug store in the Liggett group has recently been established in New York City at the corner of Broadway and Thirty-fourth Street. It is said to be one of the finest establishments in the country. At any rate, the rental amounts to $110,000 for the first year, which means $20 a square foot. The corner, however, is the busiest in the city, and apparently justifies this enormous figure. The lease will run for twenty-one years. The store has thirteen departments, including the soda fountain, and there are nearly three score employees. There are ten dispensers at the soda fountain alone. The manager is H. H. McKenzie, who has had a good deal of experience as manager of various Liggett and Hall & Lyon stores in New England. The Liggett stores now cover such leading cities as Boston, Providence, Worcester, Cincinnati, Detroit, New York, and possibly other places.

* * *

THE NEW WOMAN'S PRESIDENT. The new president of the Woman's Organization of the N. A. R. D., as we reported last month, is Mrs. Jessie F. Waterhouse, of Newton Highlands, Mass. Mrs. Waterhouse, we believe, is president of the Boston Chapter of the W. O. N. A. R. D. In club work and in speaking she has evidently had a good deal of experience. She has been a member of a literary club for upwards of ten years, and is actively interested in the work of St. Paul's Episcopal Church in her home town. Prior to her marriage she was a successful elocutionist. Mr. and Mrs. Waterhouse live at 1083 Walnut Hills in Newton Highlands.

ANOTHER RUMOR. We gather from the September issue of the *Pharmaceutical Era* that denial has been made of the rumored consolidation of a considerable number of leading wholesale drug houses in the Central States. The original report apparently was, according to the *Era*, that these houses were to continue to act somewhat independently in the conduct of their jobbing transactions, but were to unite in the establishment of a laboratory chiefly for the manufacture of a line of non-secrets like those bearing the A. D. S. and the Rexall labels. If there is anything to these reports, it will come out in time, and meanwhile we shall try to wait patiently in order to learn what is what.

* * *

COCA-COLA VERSUS THE A. D. S. The Coca-Cola Company has brought suit against the American Druggists' Syndicate in an endeavor to restrain the latter from continuing its practice of making and selling a specialty known as "Extract of Coca and Kola." The Coca-Cola people declare that its trade-mark rights have been violated, and that unfair competition has resulted. They declare, further, that several members of the A. D. S. have substituted the A. D. S. product when Coca-Cola has been called for. Accordingly these druggists are made codefendants with the A. D. S. in the suit brought to secure an injunction. To these several allegations the A. D. S. enters a general denial, and a prolonged litigation is expected to follow.

* * *

COMMITTED SUICIDE. We said something last month about the action of H. A. Metz & Co. and Victor Koechl & Co., both of New York City, in prosecuting druggists for the sale of aristol, salvarsan, pyramidon, and other products which were contraband in nature, and which had not been secured from the owners of the patents and trade-marks. Since then we have seen that David M. Schurr, of Brooklyn, who was supposed to be the source of supply for most of the peddlers of these goods in the East, committed suicide on the evening of his arrest. Other dealers preferred to stay on earth and defend themselves. The cases are still pending in the courts.

EDITORIAL

"LET GEORGE DO IT!"

The editor of the *Midland Druggist* has recently gotten rather tired of well doing—we all weary at times. He and his journal for years have stood for the best things in pharmacy in Ohio and some of the adjoining States, and much excellent work has been done in legislative and other directions. The efforts of the journal itself, too, have been supplemented by personal work of a vigorous sort.

But now, after years of unselfish and aggressive leadership, and after an equal number of years of scant and even critical support from the rank and file, the editor is indulging himself in a few minutes of pessimism. He is indignant over the apathy, the indifference, and even the carping opposition of those whose assistance he has had every right to expect. He gives a few instances to prove his point. Here is one:

> Some years ago, to help out a few reformers in a neighboring State where taxes and the oppression of unjust laws were gradually crushing the life out of the drug business, this office on its own account and at considerable expense, sent a letter to each and every druggist in that State, telling them of the movements on foot in their behalf and asking for their help in organizing the State. They were then paying State and local taxes for the privilege of doing business. By organized work they could repeal the law and save each one at least $50 a year. We did not ask them for any money, but *we got two replies from the entire State.*

Here is another specimen experience:

> An officer of the State Auxiliary who was laboring at the Capitol building like a slave to prevent the enactment of some freak legislation, sent a letter to the trade explaining the difficulties he, as chairman of the legislative committee, was having, and advised that if this bill was defeated, they would have to come across with the necessary money. An assessment of $2 was asked from each member. He got $2 from the whole State, and was afterwards asked what he did with the money contributed for legislative purposes! *If that bill had passed it would have cost every druggist in the State about $200 a year in additional store expenses.* Was that apathy or plain stupidity? Although the bill was defeated it was not due to any assistance the committee received from the trade.

Pity 'tis, 'tis true. It is the unfortunate experience of all those who strive to work for their fellows that they must largely work alone. If they count on coöperation they are likely to be cruelly disappointed. The very men who are chiefly to be benefited, and who theoretically should work the hardest to defend themselves and their fellows, are at the same time the very men who do nothing at all but kick. Afterwards, if their defense has been successfully accomplished, they are entirely willing to reap all the advantages without expressing even a thank you. If, on the other hand, failure has resulted, they are quick to come forth with their protests, complain bitterly of the incompetency of their leaders, and indulge in more or less open accusations of indifference, incompetence, or even graft.

This seems to be human nature—and human nature is often weak and erring. No disposition is more universal than the one expressed in the popular phrase of the day, "Let George do it!" How often have we seen the work of an association or a club absolutely neglected by the great majority of its members, and then, when a few willing men rushed in to do what had to be done, they received nothing but intimations that "this organization is run by a clique and there is no use of our trying to do or say anything!" This practically is an epitome of the facts in every last organization in the United States. It is true of political organizations, and it furnishes the reason for the political boss. Others simply won't do the work; somebody has to do it, and that somebody becomes a "boss" which it is now the fashion to deride. But there wouldn't be any bosses if people themselves would do their duty—there wouldn't be any room or necessity for bosses. The people themselves would be the bosses. "Shall the people rule" is a question which will be answered the very minute the people want to rule—and not before.

Oh, well, this is a pretty big question and we are wading out in the open sea. Anyway we sympathize with our friend the *Midland Druggist.* He certainly has had his troubles—but then we all have them. Cheer up! Things will be better in the by and by.

REFERENDUM VOTES ON THE GRADUATION PREREQUISITE.

Again and again we have declared our conviction that the graduation prerequisite in pharmacy can only be realized in the different States as fast as general pharmaceutical senti-

ment in favor of it is developed—and no faster. Soon after New York and Pennsylvania led the way by establishing the graduation requirement, the movement was taken up in eight or ten other States. So far, however, only in Rhode Island has a law actually been enacted, although in the State of Washington the Board of Pharmacy has established the graduation prerequisite on its own initiative. Why have the bills in the other States failed of passage in the legislatures? Simply because pharmacists were divided among themselves—because the sentiment in favor of such legislation was not sufficiently strong and unanimous.

For this reason it is exceedingly interesting and important to note that popular votes have recently been taken in at least three States—Michigan, Illinois, Minnesota. The purpose was of course to discover what the general opinion was on such legislation. The Michigan vote was taken last year and was recorded in the BULLETIN at the time. Unfortunately the voting papers were sent out in the annual reports of the State Board of Pharmacy, and apparently many druggists failed to find or see them. As a consequence only 261 druggists voted, but it is a fact of possibly considerable significance that 200 expressed themselves in favor of prerequisite legislation, whereas only 61 voted against it.

This year similar votes have been taken in Illinois and Minnesota. In Illinois, as we reported some time ago, the results were 965 in the affirmative and 247 in the negative. This represented so large a majority sentiment that at the annual meeting of the State association later on it was unanimously decided to give formal approval to the prerequisite idea, and to seek an amendment to the pharmacy act at the next session of the legislature. In Minnesota a post-card vote showed 80 per cent of the voters in favor of the graduation prerequisite, and subsequently at the State meeting another vote was taken. This resulted similarly in a majority in favor of progress, although the majority was not so pronounced.

Thus in these three States the prerequisite idea, in accordance with modern political methods, has been subjected to a popular vote. Druggists have had a chance to say themselves whether they wanted such legislation or not, and apparently in all three commonwealths a considerable majority have expressed themselves in favor of advancement. So far so good. For unless pharmaceutical sentiment is really in favor of prerequisite legislation, and will stand behind its enactment first and its enforcement afterwards, it is worse than folly to attempt it. As with all other evolutionary movements, a sufficient period of agitation and education must precede actual achievement.

BEGGING THE QUESTION.

Now, however, an interesting situation arises. In Illinois, at least, it is apparent that those who are against the prerequisite mean to keep up their opposition. Some time ago, shortly after we had chronicled the result of the Illinois vote in the BULLETIN, and had declared that a large majority were in favor of the graduation requirement, Wilhelm Bodemann wrote us a strong letter of protest. Mr. Bodemann, as everybody knows, is an open, direct, and avowed enemy of the prerequisite. He will have none of it! The very mention of it is anathema to him! What was Mr. Bodemann's complaint to us? Simply this, that the referendum vote in Illinois was not representative. Out of 5618 registered pharmacists on the rolls of the Board of Pharmacy, only something like 1200 expressed themselves. "How," he asked, "do you figure out that 965 is a majority under these circumstances?"

Well, this opens up a pretty big question. Much could be said on both sides of it. In Illinois, if there really are 5618 proprietors of retail stores, only a little over 20 per cent of them registered their opinion on the prerequisite vote. Where, then, do the other 80 per cent stand? One might argue that they want the prerequisite; another might hold that they do not want it; but who can read their minds with any accuracy? The fairest assumption is that the 1200 who voted closely represent the 4000 or more who did not vote, and that the results were therefore approximately determinative and accurate.

This, indeed, is the assumption made in all political voting. A mayor, a governor or a president is always elected by just this method. The majority of those who actually vote do the electing. Those who do not vote must be ignored, and in practice they are ignored. Take the primaries early this summer, for in-

stance, in the bitter Taft-Roosevelt feud. Mr. Roosevelt nominally carried a number of pivotal States like Ohio, Illinois and Pennsylvania. And yet the actual vote in these States represented only from 15 to 30 per cent of the total number of registered voters. Some people have since claimed that the remaining 70 or 80 per cent of the voters, if they had expressed their preferences, might have told an entirely different story, but nevertheless Roosevelt delegates were sent to Chicago.

Now we have no purpose of expressing any opinion about the Taft-Roosevelt situation, or about the Chicago convention. That is entirely beside the question. We simply want to show that in the Taft-Roosevelt primaries, as in all other primaries and elections, the day was carried by the majority of those who actually registered their opinion. The "silent vote" doesn't count and can't count. On this assumption we believe that the graduation prerequisite has fairly carried in the States of Michigan, Illinois and Minnesota, and that any attempt to show that it hasn't is simply to indulge in specious reasoning. We observe that the *Western Druggist,* in its systematic campaign against the graduation prerequisite, has argued likewise that the vote in Illinois indicated nothing, because, forsooth, it only represented 20 or 30 per cent of the possible number of voters. To us this seems like merely begging the question.

THE HALL OF FAME

THE SUDDEN DEATH OF JOHN W. DAUGHERTY.

John W. Daugherty, attorney and manager of the Druggists' Indemnity Exchange of St. Louis, died very suddenly of apoplexy several weeks ago on a train pulling out of Indianapolis. Just before that he had attended the Milwaukee meeting of the N. A. R. D., and was then in such manifest good health that his subsequent death provoked great astonishment. It appears that Mr. Daugherty had only recently been married to the Countess DeBrie of France, and, although few knew it at the time, was really on his honeymoon in Milwaukee. Mr. Daugherty was a man of ability, and he had built up the Druggists' Indemnity Exchange to a point where it enjoyed a large volume of business and the confidence of the retail drug trade of the country. Fortunately he is succeeded in the position of attorney and manager by an understudy who is thoroughly familiar with the Exchange—Mr. H. W. Eddy. For five years Mr. Eddy acted in the capacity of general representative, and is well known to

JOHN W. DAUGHERTY.

the members of the N. A. R. D. and the numerous State pharmaceutical associations. The business will therefore go on as before, and will undoubtedly continue to show the same growth and development which have been manifested from the first in the history of the organization.

RETURNING FROM DENVER.

Following the Denver meeting of the American Pharmaceutical Association in August. quite a number of the members came back east through Detroit, lured by the drug manufacturing interests of this city. Some of them paid appreciated calls at the BULLETIN office. Among them was Irving P. Gammon, of Boston, Mass., who went out to Denver primarily to attend the meeting of the National Association of Boards of Pharmacy as the accredited delegate from the Massachusetts board. Mr. Gammon, if we mistake not, is also one of the Board of Trustees of the Massachusetts College of Pharmacy, and he is a man of influence in pharmaceutical circles in

Boston and throughout the State of Massachusetts generally.

Another caller was Caswell A. Mayo, the well-known editor of the *American Druggist*. Mr. Mayo sat down in the BULLETIN sanctum and entertained us for two hours as only an accomplished raconteur could possibly do. If there is any man in American pharmacy who has a greater fund of anecdotes, and who can relate them with more grace and humor than Mr. Mayo, we have not yet made his acquaintance.

NOMINEES FOR THE A. PH. A. PRESIDENCY.

Following its usual custom, the American Pharmaceutical Association, at the Denver meeting in August, nominated three candidates for the presidency of the organization. These

CHAS. M. FORD.

names will shortly be voted upon by the entire membership through the medium of the mails. The candidates are Charles M. Ford of Denver, George M. Beringer of Camden, N. J., and F. W. Meissner of La Porte, Indiana. All three are men well known to the pharmacists of the country, and particularly to those who attend the annual conventions of the A. Ph. A. Mr. Ford has been a retail druggist all his life up to a year or two ago, when he sold out his store and became drug inspector for the State of Colorado. Mr. Beringer is a retail pharmacist in Camden, where he conducts a store of the professional type, and where he does much analytical and chemical work for the pub-

GEO. M. BERINGER.

lic and also, we believe, for the city authorities. Mr. Meissner has a store in La Porte, so that

F. W. MEISSNER.

all three candidates this year may practically be considered retailers.

PRESIDENT OF THE TRAVELERS' AUXILIARY.

George C. Frolich, one of the traveling representatives of Parke, Davis & Co., was elected president of the Traveling Men's Auxiliary of the Massachusetts State Pharmaceutical Association at the meeting in Swampscott a month or two ago. Mr. Frolich is a man of versatility. At this same meeting, for instance, he won the first prize in a contest over the identity of crude drugs and chemicals.

A crowd of delegates on the Auditorium steps, most of them from Pennsylvania, with William E. Lee in the foreground at the left of the picture.

Some of the local Milwaukee hustlers, including Messrs. Greenwood, Schmidt, Jones, Eckstein, Wilson, and Thompson. Mr. Eckstein is the third gentleman from the right.

A group of Detroiters—Charles F. Mann, Grant W. Stevens, and James W. Seeley. This was taken on the steamer trip Friday afternoon.

Among these men are Charles H. Huhn, chairman of the Executive Committee, H. B. Guilford, ex-president, and J. Arthur Bean, a member of the Executive Committee.

Miss Gertrude Mann, daughter of Charles F. Mann, of Detroit.

The one and only Wilhelm Bodemann is in the center of this jolly group.

M. B. Craig of Jacksonville, Florida, and Hugh Craig of N. Y. City.

Some N. A. R. D. Snapshots Taken at the Milwaukee Convention in August.

(We are indebted for these pictures to the courtesy of A. R. Eberle, manager of Eberle's drug store, Watertown, Wisconsin.)

A. B. Robertson, Lansing, Mich., Republican nominee for representative in the State legislature.

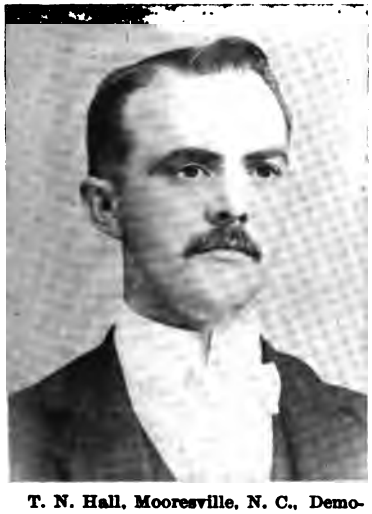
Harry E. Fox, Gaylord, Mich., nominee on the Republican ticket for county treasurer.

Archie M. Reid, Detroit, Mich., nominee for city alderman in the Fifteenth Ward.

Robert Homan, Unadilla, N. Y., Progressive nominee for member of assembly in the State legislature.

R. M. Gray, Statesville, N. C., nominated for county superintendent of Public Instruction.

Dr. R. C. Droege, Cleveland, Ohio, who has received the nomination for coroner of the county.

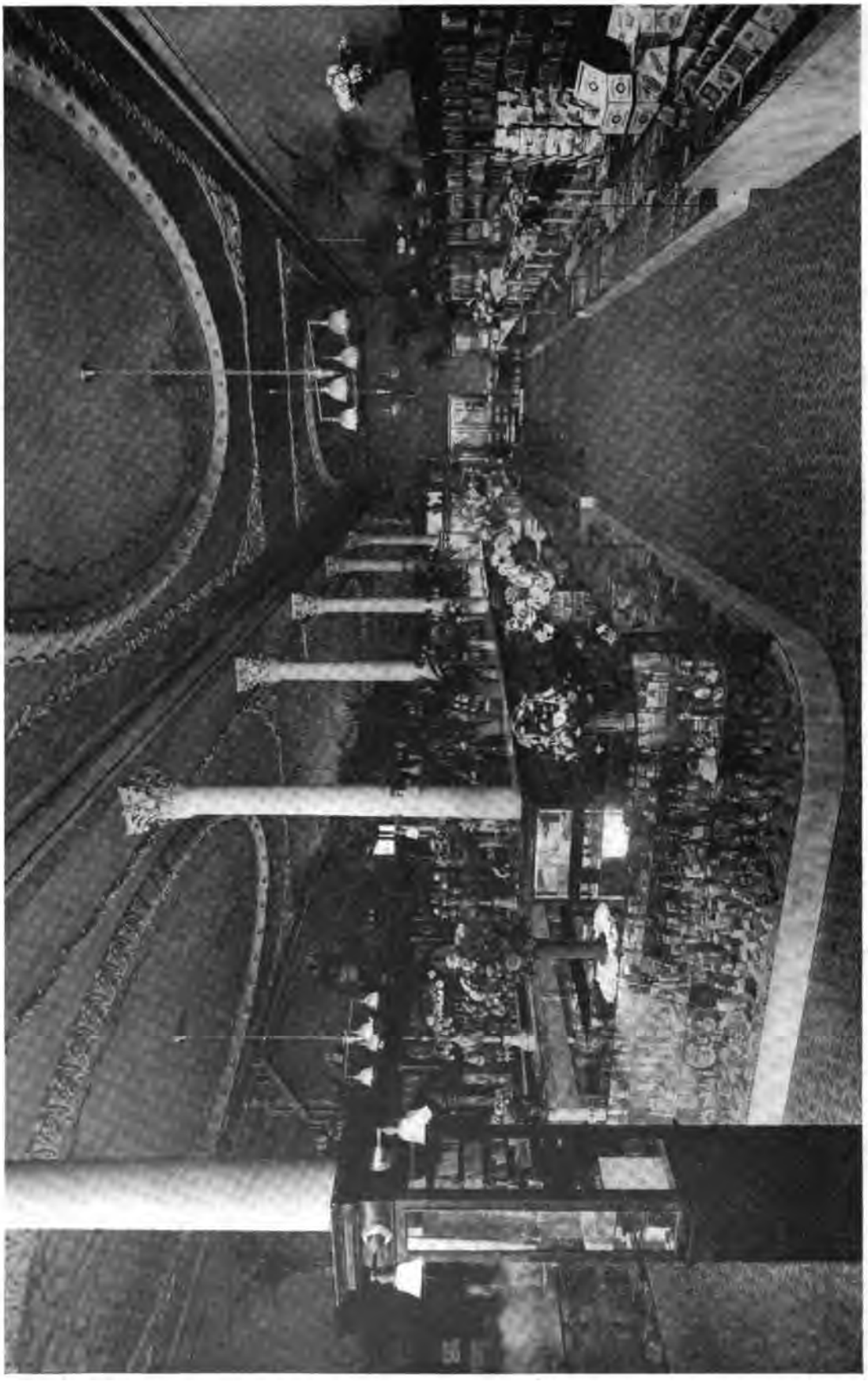


T. N. Hall, Mooresville, N. C., Democratic nominee for the State legislature.

Frank Shane, Eldon, Iowa, nominee for reëlection to the State House of Representatives.

Jos. C. Wirthman, Kansas City, Mo., a member of the upper house of the city council.

Druggists Up for Election to Public Office in November.



The New Store of George M. Weber in the Denison Hotel Block in Indianapolis.

The Walrus Manufacturing Co., who furnished the fountain, the Wilmarth Show Case Co., who supplied the show-cases, and other experts and specialists helped Mr. Weber realize his ambition to make this one of the most beautiful stores in the country. He still retains his prosperous pharmacy in the Claypool Hotel.

How the Druggist's Sundries Are Made.

SIXTH PAPER: GATHERING CRUDE RUBBER.

The Interesting Story of How it is Collected and Shipped on the Tributaries of the Amazon in the Jungles of South America—The Natives Call it "Black Gold," so Valuable is It.

By ALEXANDER P. ROGERS.*

Upon a trip last summer up the Amazon River to the source of one of its great tributaries, I had an opportunity to witness the various processes by which the enormous rubber crop is gathered in the jungles of tropical South America, and shipped to the markets of the world. From the first step to the last the

A pile of balls of crude rubber on the banks of the Madeira River in the heart of South America. The natives call this "black gold," and no wonder—for a single ball weighing 75 pounds is worth nearly a hundred dollars!

industry of producing and handling the crude rubber, or "black gold," as the natives call it, is an intensely interesting occupation. We who ride in comfortable automobiles over beautiful roads can hardly realize the amount of labor and suffering endured by a semi-civilized race of people for our pleasure; nor do the poor peons, who perform most of the actual labor, realize the boon to civilization their efforts produce. It is only after a trip such as I took through the heart of the finest rubber country in the world that a fair conception of the industry can be grasped, and an idea of the value of this wonderful substance obtained.

My party was composed of several trained observers, as all mining engineers must be, bound for the head waters of the Rio Guapore, 3000 miles above the mouth of the mighty Amazon. We thought we were going to a little known quarter of the globe, but wherever the trees existed along the upper river banks, we found these industrious rubber gatherers hard at work.

WHERE THE SUPPLY COMES FROM.

Look at any good map of South America and you will see a great network of rivers flowing from the Andes through the center of the continent, most of which finally empty into the Amazon. They spread out in every direction from the main artery of the Amazon, like the fingers of one's hand, covering the whole interior region of equatorial South America. The particular tributary I traveled on, however, had its source far to the south away from the Andes, so that we did not obtain a view of these high mountains on any part of the trip. Our course lay up the Madeira River, which is over 900 miles in length and empties into the Amazon nearly 900 miles above its mouth. From the Madeira, we passed to the Mamore for 150 miles, and then went up a tributary of that river, called the Guapore, for another 900

Poling a boatload of crude rubber in quiet waters.

miles, until the water became too shallow to proceed. In this direction, the principal rubber-growing section exists along the Mamore and Guapore Rivers, the product being taken down stream in huge rowboats to a place called San Antonio on the Madeira River, 800 miles above its mouth and at the head of navigation for ocean steamers. Above this point,

*A paper written by Mr. Rogers for "The Goodrich," published by the B. F. Goodrich Company, Akron, Ohio.

for a distance of some 220 miles, a series of ugly rapids exists. Once you have passed them, however, the river is again navigable by light draft steamers for another 1000 miles.

THE CRUDE-RUBBER BALLS OR "BLACK GOLD."

At San Antonio we obtained our first sight of the crude rubber being loaded for shipment to the markets of New York and London.

Hauling a boat of rubber around one of the rapids in the river to avoid the dangerous sport of "riding the rapids."

Here there were great piles of rubber balls, each one some 18 inches in diameter, and weighing from 50 to 75 pounds, bearing the owner's private mark burned into it for identification. They were of a dead-black color, and looked as if they had undergone rough usage on their long trip down the upper rivers. In this, however, I was somewhat mistaken, as I was later witness to the extraordinary care with which the balls are handled in descending the dangerous rapids. Crude rubber is worth $1.25 a pound, so that a ball weighing 75 pounds is quite a valuable article, and you begin to see why the natives refer to it as "black gold." My first impression, however, was one of curiosity, as I looked at these peculiar objects having the appearance of huge misshapen cannon balls with a two-inch hole through the center of each one. There was an irresistible desire to kick them and see your foot jump away again from the recoil of the rubber. You were careful not to do it many times, however, as it is very solid stuff and the operation hurts you more than it does the rubber.

TRANSPORTING THE RUBBER.

In order to pass the rapids above San Antonio, the only method of transportation that has existed up to date, for passengers and freight alike, has been to work your way in huge rowboats, shaped much like our racing yachts without any fin-keel. These boats are manned by 18 or 20 natives, and a pilot, who handles the rubber and commands the crew, for it is dangerous work and a man with thorough experience of the currents must be in charge. In going up stream, the crew sits on the gunwales of the boat and all paddle in unison over the quiet waters close to the shore where the current is less strong. Whenever a rough stretch is reached and no headway can be made by paddling, long poles are brought out and the crew resorts to poling. If the current proves too swift for this method, most of the men are sent ashore with a heavy two-inch tow-rope to pull the boat ahead by main strength.

When a bad rapid is reached, however, it becomes necessary to unload the whole cargo and transport it around to the head of the falls —a task which may take a day or so to complete. Then, the empty boat must be either worked up over the rapid, or else pulled bodily overland to the quiet waters above. It is very slow traveling, especially when the crew feels "tired," as it often does, and decides to take a rest while one of its number goes off hunting

A native gathering the rubber sap or "milk" in little cups as it drips from the tree. The process is not unlike the gathering of maple sap in the United States.

in the jungle for a fat pig or turkey, or even a monkey, to feast upon. It took us over a month to ascend these rapids, camping each night on shore in the jungle, where you must be very careful not to get bitten or stung by the snakes and insects that abound everywhere.

As all the rubber, however, is brought down stream, its rate of progress is much faster than ours was. One of these boats will hold ten

tons of freight, and the crews become so skilful that they take chances on riding over most of the smaller rapids. We would watch them coming down the center of the river at racing speed, the paddlers all in their positions on the gunwales, and when they approached a rapid the men would work like mad to force their boat into the smoothest part of the current. Then the excitement was intense, as they shot

A rubber collector's hut on the Rio Madeira, in the midst of the South American jungle.

down the steep incline like a millrace, and went bounding over the great billows below, and finally entered quieter waters again.

DANGEROUS WORK.

They are not always lucky enough to come through so easily, however, as a wave may wash over the sides of the boat, or they may not be able to avoid some of the rocks and sunken timbers which abound in the dry season. Then a tragedy usually follows; the whole crew may lose their lives, and the cargo may be lost. The rubber balls will float in water, but in this wild region they become scattered easily, and a large percentage are never recovered by the rightful owner, once they get adrift in this wide river. I saw one such crew clinging to their swamped boat. They were rescued just in time before another rapid was reached, which would have hurled them to destruction.

The more conservative shippers generally insist that great care must be taken, and require their men to land above the rapids and either transport the rubber around on land, or else float the balls in bunches through the quietest part of the rapids. This is quite an interesting proceeding. Perhaps 20 or 30 balls are strung on a large rope, which passes through the hole in the center of each one. With a man in front and another behind this string of balls, and perhaps one or two other men carefully guiding the center, they swim from point to point until the foot of the rapid is reached. There the balls of rubber are unstrung and piled on the shore, while the men return for another load. Finally, the boat itself is let down and reloaded as before.

When you consider there are over twenty bad falls in these rapids, and innumerable minor swift places, you can realize the expense and risk involved in sending a cargo of $10,000 or $15,000 worth of rubber through this section of the river.

A RUBBER RAILROAD.

The losses in the transshipment of rubber by water, indeed, have been so great that the Brazilian government has finally come to the rescue and is now building a railroad, 220 miles long, around the rapids. The history of this road would make an interesting story in itself, but I have only space here to mention it in a cursory manner.

Bordering the Madeira River, the jungle is one of the worst and deadliest in all the world. All the natives are infected with malarial fever,

An Indian hunting with a blow-gun in the Amazon forest.

and it has been a hot-bed for yellow fever and the terrible beriberi. Out of the first 52 men sent to survey the road, 49 died in a short time, and the remaining three fled in terror. Finally, Americans, with great experience and indomitable courage, backed by strong financial interests, took charge of the work and have just completed it. If it had not been for our experience in Panama, I even doubt if they could have been successful. To one who rides

over the line to-day in a comfortable coach, these statements may appear like exaggerations, as he does not realize what deadly enemies, in the form of intangible microbes, lie hidden in those quiet jungles, which can be conquered only by costly preparation, and a trained medical service.

The result of the railroad will inevitably be to displace the romantic and dangerous river travel over the rapids, but we are living in a material age where the loss of life and valuable property will not be tolerated, even at the expense of romance. To-day the trains make this distance in one day, which we took over a month to cover. The upper terminal is at a place called Guajura-Merim, where we embarked on a small river steamer for the trip up the Rio Guapore.

THE RUBBER TREES.

As this place is at a slightly higher altitude and 10 degrees south of the equator, the weather becomes much more agreeable. On both sides of the river thick jungles existed in which, every now and then, the pilot pointed out a rubber tree to me. Where so many similar trees grow, it was very difficult to pick out the real rubber trees, but after a time I became sufficiently expert to distinguish them by their small leaves. They grow wild to perfection all along the banks, and attain a height of 50 feet or more. Like many large tropical trees, however, the trunk shoots up straight and clean without any branches on it until the head is reached far above the ground. We have no trees in our northern climate which resemble them very closely. The tree here is not, however, a rubber tree.

On our trip up the river we were obliged to tie up to the bank very often to cut fire-wood, and then I amused myself in tapping the rubber trees in the neighborhood. They were all scarred in many places, from the ground up as high as I could reach, by former tappings, but yielded some milk every time I cut them.

The sap, or milk as as it is called, looks exactly like tinned sterilized cream, and flows directly under the bark. Whenever you cut into a tree with an ax or a machete, it drips out very slowly, not unlike the sap from a maple sugar tree. Of course I did not have time to collect any quantity of the milk, but what little I did save gradually solidified into a yellowish-white substance that could be stretched and snap back, just as an ordinary rubber band will do. It seemed very curious to see this white liquid assume such qualities, and it was a never-ending source of amusement to me.

WHOLE FAMILIES GO COLLECTING RUBBER.

The season for gathering the rubber crop in this latitude begins about the middle of the dry season, or during our summer months. We occasionally passed whole families drifting down the river from the small settlements above on their way to certain places where the trees were very numerous. These were happy-go-lucky companies who traveled

The rubber trees are to be found in these thick jungles all along the banks of the Amazon and its tributaries.

in a unique kind of craft. Two large rowboats were lashed together and covered with a set of long poles to make a flooring 10 or 12 feet wide by 15 or 18 feet in length—something like a huge "catamaran." Around the edges of the floor, walls were erected, and the whole thing was roofed in like a house. All that was visible of the boats were the prows sticking out at each end, and in them the men sat who directed the course of these strange craft.

Within the house, at each end, a great quantity of corn on the cob was stored for the use of the workers during the season, filling half the room from floor to roof. The remaining space was used by half a dozen women and children, as well as several pigs, dogs, chickens, parrots, and a monkey or two. There were at least 20 or 25 human beings, besides the various animals, in one of these craft that I saw, but they all seemed to be happy and enjoying life to the full. They would be engaged in their work of gathering the rubber for four or five months, after which they would return to the settlements for the winter. The length of time depends upon their inclina-

tions, as they operate upon their own initiative and for their own profit.

IMPROVING THE YIELD.

Most of the large areas along the Rio Guapore, however, are owned by progressive European companies which carry on their business upon strictly up-to-date methods. They own tremendous areas, where the soil is adapted to the rubber tree, and maintain nurseries and experimental stations to increase and improve the trees. They also own and operate several river steamers, which ply between the stations for the purpose of collecting the rubber from the various sections and transporting it to the shipping points. To gather the rubber from places inland, away from the river bank, they have built long roads through the jungle over which huge wooden ox-carts can travel. Then a system of stores is generally established in various parts of the property, where the peons and others can buy the necessities of life. The rubber crop is usually gathered on a contract basis, the peons being sent out for the season, and paid for the rubber they bring back.

The Brazilian government is alive to the value of its rubber crop and does everything it can to promote the industry. For example, it is against the law for any one to cut down or mutilate a rubber tree, and if you are seen to do such a thing anywhere in the country, you will immediately get into trouble.

BUENOS AIRES THE SHIPPING POINT.

Toward the upper end of the Guapore River, the distance to the ocean down the Amazon is so great, and the rapids have proved so costly, that it has been found cheaper to take the crude rubber up stream and 200 miles overland across a low continental divide to the Paraguay River, down which it is transported 2500 miles in steamers to Buenos Aires for shipment to Europe. This will all be changed, however, as soon as the railroad is in operation around the Madeira rapids, and the product will then go down the Amazon.

After my return to civilization from that interior country, where only at long intervals any news of the outside world is ever heard, it seemed strange to me that any human being would pick out such a wilderness to dwell in, even for "black gold." If one were born and brought up in the region, and had never seen anything else, I can imagine he might be happy, but it is not an attractive place for an outsider to stay in under any condition.

[NOTE BY THE EDITOR.—The foregoing paper is confined to the collection and shipping of crude rubber. The story of how this crude rubber is manufactured subsequently into many articles handled in every drug store was told in the BULLETIN for June of this year.]

IMPROVEMENTS IN OFFICIAL FORMULAS.

Slight Changes which Lead to Perfection in the Manufacture of Several Galenicals—Paper Read at the Denver Meeting of the American Pharmaceutical Association.

By S. K. SASS.

Many pharmacists, if unsuccessful in their first attempt to make some preparation according to the formula in one of the official books, will freely and unfavorably criticize the book, the constructor of the formula, or the committee of revision.

A little thought about the perplexing formula, patience, and some experimental work, with the expenditure of a little money, are the only things necessary to find out that the formula in most cases is good or nearly so.

We must remember that we do not all work under the same conditions, that atmospheric and climatic changes play an important rôle in some cases, and that the change of seasons acts as another joker.

AROMATIC ELIXIR.

Using magnesium carbonate, in place of purified talc, gives better results. Five grammes is sufficient to prepare 1000 Cc. of perfectly clear elixir.

ELIXIR OF THE PHOSPHATES OF IRON, QUININE AND STRYCHNINE.

This important elixir is not as difficult to prepare as it at first appears. If prepared, as suggested by Mr. Dunn, with a slight change in the directions, a most satisfactory prepara-

tion, which will keep for a long time, is obtained. The formula and directions in the Pharmacopœia should be changed to read as follows:

Soluble ferric phosphate	17.500 Gm.
Quinine	8.750 Gm.
Strychnine	0.275 Gm.
Phosphoric acid	2.000 Cc.
Ammonium carbonate	5.000 Gm.
Alcohol	60.000 Cc.
Acetic acid	16.000 Cc.
Distilled water, Aromatic elixir, each a sufficient quantity to make	1000 Cc.

Dissolve the quinine and strychnine in the alcohol, then add the phosphoric acid and *three hundred and fifty cubic centimeters* of aromatic elixir. Add the acetic acid to the ammonium carbonate, contained in a suitable vessel, and when solution is complete add enough distilled water to make the product measure *fifty cubic centimeters.* Mix the solution of ammonium acetate with the solution of the alkaloids, and add enough aromatic elixir to make the liquid measure *eight hundred and eighty cubic centimeters.* Dissolve the ferric phosphate in *fifty cubic centimeters* of distilled water, and add enough aromatic elixir to make the product measure *one hundred and twenty cubic centimeters.* Finally, mix the two solutions and filter.

NOTE.—If precipitate appears, agitate until dissolved. Keep in a bottle covered with dark paper and well corked. This preparation will slightly darken with age, but its efficiency is not thereby affected.

SYRUP OF HYPOPHOSPHITES.

When made adhering strictly to the formula and directions of the U. S. P., this preparation is a failure. It will not keep for any length of time. When finished, it is not of the U. S. P. strength, as some of the hypophosphites are precipitated and left in the filter.

After some experimentation, I came to the conclusion that a little change in the formula, which does not affect the active principles, is necessary. Therefore I suggest the following as entirely satisfactory:

Calcium hypophosphite	45 Gm.
Potassium hypophosphite	15 Gm.
Sodium hypophosphite	15 Gm.
Diluted hypophosphorous acid	2 Gm.
Lactic acid	1.25 Gm.
Sugar	640 Gm.
Water, a sufficient quantity to make	1000 Cc.

Dissolve the hypophosphites in *four hundred and fifty cubic centimeters* of water, and add the diluted hypophosphorous acid, lactic acid, and the sugar, which dissolve by agitation, and add enough water to make the product measure *one thousand cubic centimeters.* Filter, and keep in a glass container, well corked.

COMPOUND SYRUP OF HYPOPHOSPHITES.

The U. S. P. formula requires an increase in the amount of sugar called for, and a rearrangement of the directions. If these corrections are made, a most satisfactory preparation will result.

The formula and directions are as follows:

Calcium hypophosphite	35.000 Gm.
Potassium hypophosphite	17.500 Gm.
Sodium hypophosphite	17.500 Gm.
Ferric hypophosphite	2.250 Gm.
Manganese hypophosphite	2,250 Gm.
Quinine	1.100 Gm.
Strychnine	0.115 Gm.
Sodium citrate	3.750 Gm.
Diluted hypophosphorous acid.	15.000 Cc.
Sugar	815.000 Gm.
Water, a sufficient quantity to make	1000 Cc..

Dissolve the calcium, potassium, and sodium hypophosphites in *three hundred and seventy-five cubic centimeters of water,* to which *five cubic centimeters* of diluted hypophosphorous acid has been previously added. Dissolve the quinine and strychnine in *thirty cubic centimeters* of water, to which *ten cubic centimeters* of diluted hypophosphorous acid has been previously added. Rub the ferric and manganese hypophosphites with the sodium citrate, add *thirty cubic centimeters* of water, and warm the mixture on a water-bath, stirring continually until the salts are dissolved and a clear greenish solution is obtained. Mix the three solutions in the order named. Dissolve the sugar by the aid of a water-bath, and filter. Finally, add enough water, through the filter, to make the product measure *one thousand cubic centimeters.*

NOTE.—Keep in a bottle covered with dark colored paper, and well corked. In the northern latitude, and during the cold season in some sections, the sugar may be reduced to 805 or 810 grammes.

In conclusion, I may say that to be successful in making these and many other preparations only the best and purest material obtainable should be used. We cannot expect good results from cheap, inferior material. Consider as a guiding principle in your work the fact that there is nothing too good for the sick, that whatever is not good enough for your loving wife, your dearest child, and your father or mother is not good enough for any one else. We should be conscious of the duty we owe to humanity. We should keep in mind that we are only the servants of the suffering, and as such should serve them rightly, with a sincere and honest consideration for their welfare.

"MY BEST ADVERTISING SCHEME."

Three Successful Plans—An Inexpensive Way of Obtaining a Reliable Mailing List—How a Druggist Impressed His Townspeople with the Scope of His Prescription Business—Stimulating Sales by a Unique Premium Idea.

HOW I OBTAINED A MAILING LIST.

By H. E. Read, Altamont, Kansas.

I wish to describe the plan which we used to secure a mailing list. It certainly was a wonderful success. We obtained in all 1795 names, and when we cut out the duplicates we had a good, correct mailing list representing nearly every farmer in our community—over 400 correct names.

THE PLAN INEXPENSIVE.

The plan cost us about $2.80 for the advertising and $4.30 for the premiums. The books

H. E. Read.

cost us 9 cents each and the fountain pens 50 cents each. This may seem a little high for a mailing list, but previous to this we had to pay $1.00 to $2.00 for each of the route lists. The postmaster is not allowed or at least will not give them out except on special occasions, which made it necessary to get some one to run the lists for us. Then when we did get them, we had only about one-half the farmers. Furthermore, many of them who trade with you may get their mail off a route from another city. Consequently they never receive any of your advertisements, if you have a list of just the rural routes going out of your town.

We sold our list to another merchant of the town for $3.50, about half its original cost to us. This makes the plan less expensive. Of course, one would not desire to sell his list to his competitor, but you can find several mer-

Prizes Given Away to Boys and Girls

We want names and addresses of every one in your community and will pay you for them.

Read the Instructions Below.

To any boy or girl giving address of most farmers on all rural routes running out of Altamont, we will give a $1.00 fountain pen.

To any boy or girl who gives the most addresses of farmers living within 8 miles of Altamont not on Altamont routes we will give a $1.00 fountain pen.

Any boy or girl giving us address of more than 20 farmers (men over 21 years old) now living on routes 1, 2, or 3 out of Altamont we will give the choice of any Alger book in the 15-cent edition.

Any boy or girl giving us the address of more than 20 farmers living within 8 miles of Altamont that are not on the Altamont routes we will give any Alger book in the 15-cent edition.

Now boys and girls, if you know 20 farmers, you can get one of the books. And if you know more than any one else, you can have the fountain pen.

CONDITION.—The full initials and name must be spelled plainly, on any kind of tablet paper. Write on one side only. All named must be farmers over 21 years of age.

READ'S DRUG STORE,

Phones 21 and 68 Altamont, Kans.

This newspaper ad. shows how Mr. Read solicited names.

chants in most any town who are anxious to secure a complete and correct mailing list. If you can show them it is correct and complete, most of them will be willing to defray half the expense.

THE RESULTS.

The prize contest was a good advertisement, as it made friends and customers of those com-

peting. We secured several men customers just from the fact that their children were contestants. We gave every one who sent us 20 names a book. We were, of course, supposed to correct the lists. But we did not do that unless the contestants were close to the highest number of names. To have graded some of the contestants down might have disappointed them. They would not have received a book.

The editor of the paper ran the last advertisement—*i.e.*, the list of the winning contestants—as a news item free of charge, and seemed very glad to get the names.

The mailing list was the best, largest, and most easily secured of any that I ever obtained. Any merchant can follow the same plan.

BOOMING OUR PRESCRIPTION DEPARTMENT.

By W. B. Camburn, Owosso, Mich.

In the accompanying illustrations are shown two displays of a strictly pharmaceutical nature. One is made of prescriptions, the other of laboratory apparatus. The trims were arranged by R. E. Wood. We conceived the idea of making a special feature of our prescription department as the new prescriptions which we had filled were approaching 50,000 in number.

Wade B. Camburn.

During our spare time we printed about 250 signs on cardboard that read "50,000," nothing else. These signs were tacked about town where they could be easily read from the street or sidewalk, and were about one week in advance of our window displays and newspaper advertising. They attracted considerable attention and caused much speculation as to their meaning.

A few days after the signs were up, we had

Display of pharmaceutical apparatus in Mr. Camburn's window.

"50,000" in local columns of both daily papers. A little later this number appeared at the top of our advertisement in these papers with the

Fifty thousand prescriptions were exhibited in Mr. Camburn's window.

announcement that on a certain night the meaning of the 50,000 would be explained in this particular space. The people were asked to watch the place. Our window display appeared the same day as the explanation.

There had been so much interest taken in the mysterious 50,000 that our announcement and window trims attracted a great deal of attention. One newspaper reporter took up the matter and gave us quite a complimentary report of it in the local daily. During the time we were running these window displays, our space in the newspapers was used to boom our prescription department and to make known our facilities for filling prescriptions.

We also enclosed a folder calling attention to this department in every package that left our store. On Saturday these folders were placed in every farmer's wagon.

This particular advertising scheme attracted more attention to our store than any plan we ever used. It is needless to say we have enjoyed a decided increase in business along the line of pharmaceuticals.

EXPLOITING STORE SPECIALTIES BY THE PREMIUM PLAN.

By Roy S. Warnack, New Orleans, La.

Just before Christmas the thought to give or not to give occupies the mind of almost every druggist. It has been the policy of so many

Roy S. Warnack.

pharmacists in the past to give away calendars or souvenirs having a substantial value around the holidays, that in some localities it has become a fixed custom. People expect it and do not really appreciate the expense to the giver. They accept such gifts as a matter of course. They evidence no surprise on receiving them and rarely say "thank you" even though the cost has been great. The advertising value is very small.

"LAGNIAPPE" IN NEW ORLEANS.

Especially is this condition true in New Orleans where the giving of "lagniappe" is the fashion. "Lagniappe" is ancient history in New Orleans, but for the benefit of my readers let me say it involves the giving of

Mr. Warnack's window display.

something for nothing. It means that on every five-cent sale one has to give about half a cent's worth of candy or gum. Purchasers of larger amounts expect a proportionate "lagniappe."

It has been our experience that charging a good price for our services as well as our merchandise gains us a large amount of respect as well as a larger bank balance. So we decided to apply this principle to our gifts during the past holidays. To-day as we look back upon the plan which we adopted, we are more than pleased. For the results were even better than we anticipated. We give the details of the scheme to Bulletin readers, believing it will be profitable to any one using it at any season. Christmas or New Years is not a necessary pretext for launching such a plan.

CUP AND SAUCER PREMIUM.

The gift which we made was a cup and saucer and our purpose was: First, to gain new friends for Lorraine Health Tea, one of our specialties; secondly, to exploit any other of our preparations by making the gift contingent on their purchase.

The cups and saucers were very pretty, being the kind usually sold at twenty-five and thirty-five cents in the Japanese stores. We bought them from a local jobber for fourteen dollars a gross in a four-gross quantity. We

neatly wrapped with each cup and saucer an envelope specially printed for the purpose, containing a liberal sample of Lorraine Tea.

Then we had printed several thousand circulars describing and explaining the offer. Our method of distributing them was to send out our two delivery boys, having them make a house-to-house canvass within a radius of twelve to fifteen blocks of our store. They did not throw the circulars into alleys and under door-steps, but delivered them personally, usually to the madam of the house, with the brief remark, "This is a message to you from your druggist, Mr. Schertz."

Any errand boy can do this work intelligently, and it is a good deal cheaper than the mail. Furthermore, the chances of the circular being read are better. A few were mailed to customers residing at a great distance, first-class postage being used.

The next feature was the window display. Our window is a large one, and the display consisted entirely of packages of the tea and the cups and saucers which we were giving away as premiums. In the center of the window two large show-cards 22x28 inches were shown, duplicating as near as possible the circulars distributed. Some of the empty cartons of the preparations were attached with glue to the card marked "Our Specialties," making a very striking display.

Then in the store, signs which I made extolling the merits of our preparations were in evidence on every hand. One home-made stand with a large card marked "Our Specialties" displayed plainly seventeen different preparations.

To the special preparation made for this sale, including the use of much printers' ink, window display and store display, was added the enthusiastic effort of our sales force.

We gave away in two weeks four gross of the cups. The sale would have been a success had no purchases been made of more than twenty-five cents, although they averaged considerably above this amount.

The results of this sale were many. I sum them up as follows: Every man's efficiency has been increased, his salesmanship developed. Samples were distributed where nine out of ten will be used. Lastly, we made many new friends for the various preparations bought, giving a cumulative result impossible to estimate but which we see proof of every day.

A DRUGGIST'S MARDI GRAS FLOAT.—This illustration shows a float arranged by Roy S. Warnack and his fellow clerks for participation in the New Orleans Mardi Gras last winter. The men are dressed as Lorraine Guards. The famous Joan of Arc is mounted on horseback, while the Duchess of Lorraine rides in the chariot. Clad in this carnival uniform, and liberally equipped with samples, they made their specialty, "Lorrainets," conspicuous in the merchants' parade.

RELIEVING THE CROWDED CELLAR.

How Congestion May Be Avoided in the Basement—Arranging Containers Systematically—Labeling Them Plainly—Getting Rid of Contaminated or Useless Receptacles—How to Build the Shelving—Other Pointers.

By J. F. RUPERT,
U. S. Navy, Hospital Corps.

The drug business is carried on in crowded quarters. Whatever be the condition in front, the back room will be found congested. The basement, too, is overburdened. Especially is this so in stores selling the proverbial paints, oils, and varnishes in connection with drugs, soda water, cigars, and stationery.

In our rush and hurry to make "quick sales and small profits," we are very apt to jam things onto shelves or set them on the floor of the basement. While this practice often saves time in a rush, if articles are left in that condition we soon find things "all balled up."

With a little elbow grease and energy we can often better matters. The overhead space in the basement can be used for suspending many articles, thus placing them out of the way, removing them from danger of breakage and from the dampness of the floor, and placing them in a readily accessible location.

Long spikes can be driven into the beams at proper intervals. Then clean jugs and cans, such as syrup and liquor containers and alcohol cans, can be kept in one location. Other receptacles which have contained medicines or drugs that unfit them as containers for medicines intended for internal use can be kept in a distinctly separate place.

Clean jugs I have always labeled "clean" with a string tag. Such products as hydrochloric acid, linseed oil, formaldehyde, ammonia, etc., I have always labeled with the name of the last article contained. This plan removes all question as to the condition of the containers and prevents contaminations due to the use of old containers.

The practice of smelling a jug is a slow and uncertain method of determining its fitness for certain uses. Jugs and cans should be thoroughly cleansed, inside and outside, before storing. Old labels should be removed, and if any corks have been pressed into the jugs they should be removed. Inserting a loop of a strong cord and inverting the jug does the trick. One had better first make certain that no water remains in the jug unless he does not object to having his neck irrigated.

Cans should be thoroughly dried by placing them over the furnace or radiator or other warm place, and jugs should be thoroughly drained. The reason is to prevent rusting inside of cans and to avoid trouble when liquids immiscible with water are dispensed. More than all this, every jug or bottle after cleansing should be securely corked with a good stopper. This saves time when needed and prevents the ingress of dust and insects.

CELLAR NO PLACE FOR JUNK!

Too much junk is stored in some basements. The basement and back room should be kept thoroughly overhauled at all times. Worthless stuff should be burned or hauled away. Old leaky cans, broken glass and jugs, old boxes and barrels and excelsior, ashes, kegs, and what-not do not grow into wealth and are often the cause of starting and spreading of fires. Empty oil barrels and liquor kegs can always be sold to butchers, oil and grease dealers. Farmers also are on the lookout for these articles. If no market can be found for them, a little "ad" in the local papers will often open the way. Farmer customers are always glad to remove boxes, barrels and lumber that cannot be burned in the summer or otherwise disposed of at any time. Barrels and kegs easily dry out and fall together if left in a dry place for some time.

The basement should be thoroughly swept up at least once weekly after sprinkling.

Shelves can be easily built suspended from the ceiling and used to store liquors and syrups in jugs or bottles, mineral waters, paints, patents, ink, empties, and what-not. Syrup, liquors and other stock can all be stored overhead by attaching a tag on a long string. This makes it easy to find the article wanted.

Kegs and barrels should be assembled and kept on racks. Metal tanks into which barrel contents are pumped as received will prove more satisfactory, requiring less storage room, less heavy labor, no waste by overflow of measure and leakage from jammed barrels, and preventing what often happens: the breaking off of the faucet or "gate," sometimes resulting in the loss of the entire contents of the barrel.

Liquor barrels and kegs should be kept covered with damp cloths to prevent evaporation. This is often considerable, especially in a warm dry place where sales are slow.

Bins should be securely built to store coal and ashes and should have all cracks closed to lessen the dust nuisance.

LABEL ALL CONTAINERS.

Every article in the basement should be distinctly labeled in black on large white placards, as the light is usually poor. This label should be transferred to full packages when empties are removed and the date and price and source of the article of invoice should be continued on the card. This readily informs one how much of that article is used, year by year, shows the difference in prices and from whom purchased. If liquids are dispensed from barrels and kegs, on this white label should also be tallied the amounts drawn off at various times. This is especially convenient for the close buyers. It also tells who supplied the goods when complaints become necessary.

Empty prescription bottles should be stacked so as to allow ready access, and the various sizes should be distinctly labeled as indicated. This assists the boy to distinguish a three- or four-ounce from a four- or six-ounce.

More than one dollar has been lost by rushing into the basement, digging into a box for a bottle of mineral water, finding it is the wrong box, dropping and breaking the bottle in a hurry to get at the article wanted. All this is prevented by a distinct label.

Heavy packages should be stored as near the elevator as possible, other things being favorable, to prevent much heavy work. Elevators should be built-in with some judgment when the building is erected. I have seen elevators facing exactly the wrong direction, necessitating dragging everything around the corner, when it would have been exactly as convenient and no more expensive to build it right. It was simply done without thought.

ATMOSPHERIC CONDITIONS.

Articles should be stored with some consideration of the local condition in the basement and the properties of the substance stored. Glauber salts and sal soda will "melt" if kept in too damp a place, while paint cans will rust under the same conditions and some articles will mold. Light has a harmful influence on inks and colored articles such as crepe or tissue paper. Altogether, a dry dark basement is better than a basement with too much sunlight, and a damp condition will be favorable to storing a few articles, such as paint brushes and sponges.

Containers should be raised more or less from the floor and should not touch the walls. If a furnace is fired in the basement room, inflammable liquids and matter easily ignited should be moved as far as possible from danger. A clear gangway should be left sufficiently wide to allow the rolling of a barrel.

The stock properly stored in the basement will depend entirely on local conditions. Glass had better be stored in a bright, light place as it is a delicate article to handle. The scales should also be placed in a well illuminated location. Drugs to be weighed should be placed conveniently.

Ventilation should be arranged for and assiduously attended to.

OLD BOTTLES.

I do not allow old bottles to collect, but in case it is found that many have accumulated "here and there and everywhere," they should all be gathered together and the various sizes sorted into bins. These old bottles should be thoroughly cleaned and can be used to dispense varnish, oils, carbolic acid, gasoline, ammonia, wood-alcohol, shellac, liniments, etc. Many of these articles should be kept "put up" and neatly labeled ready for sale. A number of old bottles of various sizes should be always kept ready for use to dispense liquids meant for external or commercial use. Odd sized bottles should have the price marked on the labels in code to insure charging the same price if the bottle is returned to be refilled.

Five-pint and gallon bottles can be kept cleaned and stoppered and may also be suspended by cords to the ever-faithful overhead beams.

Cash register and typewriter cases, etc., which may never again be used, but which if

destroyed would be wanted, can be permanently fastened to the beams overhead with a few nails and box lumber.

Lockers containing paints and paint specialties should be distinctly labeled on the outside.

This systematized arrangement of the basement will not only greatly assist in rapidly and properly caring for the trade, but will prove most convenient for the information of new clerks when changes in the help are made.

HOW THE COCAINE TRAFFIC IS CONDUCTED.

A Typical Chicago Case Unearthed after Seven Years of Protection from the Police—A Shanty in the Red Light District Used as Headquarters—As Many as 500 Customers Served Daily.

The way in which cocaine sellers are protected in their nefarious traffic in the leading cities is well illustrated by an exceedingly interesting report from the Illinois State Board of Pharmacy. Chicago has evidently been

This was the house of Eugene Hustion, 2511 Dearborn Street, Chicago, who carried on a prosperous business in "dope" for seven years under the protection of the police. His disreputable customers came to the back door for the stuff.

going through for a year what New York has been experiencing ever since the Rosenthal murder. In New York it has been found that practically all forms of vice and gambling are protected by the police—for a consideration. In Chicago the same thing was suspected last year, and Mayor Harrison thereupon requested the Civil Service Commission of that city to investigate the facts.

THE COCAINE TRAFFIC IN CHICAGO.

What the Commission found with reference to the cocaine traffic is of particular interest to the drug trade. Approximately 50 places were discovered where cocaine and other narcotics were being sold unlawfully; conclusive evidence against 35 of them was secured; and over 100 persons were arrested. Practically all of these people had formerly been protected by the police, and in one flagrant case, that of a man who frequently sold as many as 500 fiends in one day, the police had collected as much as $3000 a year for hush money. This particular offender was never arrested by the police, and when two or three outside organizations procured evidence against him, small fines of $25.00 and $50.00 were imposed—fines which he laughed at as mere jokes.

Finally, when the Civil Service Commission discovered the facts, and prosecuted this dope

This picture shows the rear of Hustion's house. Note the beaten path through the snow made by customers traveling from the alley to the back door. Observe also the exceedingly suggestive sign on the fence: "Coal and wood coke."

seller to the limit, he was sentenced to six months in the House of Correction and assessed with fines aggregating $800. Until the Commission began its work in connection with the narcotic traffic, indeed, not a single sen-

tence of imprisonment under the cocaine law had ever been imposed since the passage of the act.

A STRIKING CASE.

The history of this man's operations, and of the manner in which he was finally apprehended, is given in the annual report of the State Board of Pharmacy, and we are going to print it in full because of its deep and dramatic interest. Before doing so, however, we want to make it clear that the man was not a druggist, so that his sins and offenses are not to be charged up against the profession of pharmacy. Furthermore, we do not find that any of the other sinners caught by the Civil Service Commission or by the Illinois Board of Pharmacy were members of our calling. Several druggists in the dope district were under suspicion, but apparently no direct evidence was obtained against them.

This is a living room in Hustion's house. Every bit of available space is filled with goods and furniture which had been received in exchange for cocaine. One "fiend," a promising young man recently married, had practically traded off all of his house furniture, piece by piece, in order to get "coke."

The records of a wholesale druggist in Chicago showed, however, that during the year he had sold to a retail druggist, just across the State line in Indiana, 150 ounces of cocaine, a good portion of which, it was thought, had found its way back into Chicago to supply the needs of illicit sellers. A licensed physician, too, was arrested red-handed in the sale of two ounces of cocaine to a degenerate negro retailer of the drug, and admitted the purchase from a reputable wholesale and retail druggist of over 30 ounces in a single month.

And now for the story of the dope seller who was protected for seven years by the police, and who sold "coke" to hundreds of customers daily:

A TYPICAL COCAINE "PLANT."

The most typical of the cases investigated in Chicago is that of Eugene Hustion, a diminutive negro.

For the past four years, and up to the time he commenced a sentence in the House of Correction for the illegal sale of cocaine, Hustion resided in a one-story and basement frame cottage at 2511 South Dearborn Street, Chicago, and in that house conducted an extensive business in the sale of cocaine, morphine, opium, and other drugs. He and his wife, Lottie Hustion, a full-blooded Indian of the Cherokee tribe, as well as inmates of the house, were all users of cocaine, and Hustion himself was an opium smoker.

The majority of Hustion's customers were served through the kitchen door. They were not permitted to come into the house, but were compelled to stand on a covered back porch, screened from the street, and the door chain was always kept fastened so that the door could be opened only a short distance.

The investigators observed as many as sixty persons going to the back door during a period of about one and one-half hours, and Hustion testified that the number of customers coming to his house was as high as four or five hundred daily.

RAMIFICATIONS OF THE TRAFFIC.

The sale of cocaine to these people was ordinarily in small quantities, the usual amount being four grains, costing Hustion about four cents, and retailing at twenty-five cents. In addition he had what he called his "automobile trade," and also testified that he personally delivered cocaine and morphine at the homes of wealthy women in the residential district of the south side. He had peddlers in his employ who found their customers in the south side vice district, and also made deliveries by means of messenger boys.

Hustion testified that he had been arrested a number of times and had been fined frequently. The records, however, show that during the year 1911 he was fined but twice prior to the time the Civil Service Commission's investigation of the Department of Police commenced. The first time was in June, 1911, when a complaint was made by a civic organization to the Chief of Police that one of its investigators had purchased cocaine of Hustion. The chief directed the lieutenant in command to take steps to stop the sale. The steps taken were to arrest Hustion and secure a $25 fine. Later the Board of Pharmacy secured evidence against Hustion, and he was fined $100.

PAYING THE POLICE FOR PROTECTION.

The investigators learned of the existence of Hustion's place about the middle of November, 1911, and made their first purchase on November 17, 1911. The house was thereafter kept under more or less strict surveillance. A number of other purchases were made, and on December 15 Hustion was placed under arrest and his home raided. In it was found 33 ounces of cocaine, together with scales, weights, and containers for dispensing the same. On the same day Hustion made a complete statement to representatives of the

commission, in which he said he had been operating for seven years and that he had paid members of the police department an average of $3000 per annum for protection. He subsequently went upon the witness stand during the trial of certain police officers, including the commanding officer of the precinct in which he resided, and repeated his testimony without contradiction. He was not cross-examined, nor was any effort made to disprove or impeach his testimony.

One thing, however, was concealed by him—the names of the policemen to whom he had paid protection money. This he would not divulge, stating that he had given his word and would keep it.

After his release on bail he started to sell again, and the investigators made a number of purchases at his home, but all of these purchases were not made from Hustion direct. Warrants were sworn out against him in four cases.

IN THE MESHES.

The first case against him was called on December 16. Hustion demanded a jury trial, and the case was continued to December 29 and assigned to Judge Dolan. On December 30 his case was again continued to January 17, and on that date he was tried before a jury and found guilty. A motion for a new trial was made and set for hearing on January 20. Later a second case against Hustion was tried before a jury, resulting in a verdict of guilty, sentence being reserved until the two other cases against him were set for trial.

By this time both Hustion and his lawyer saw that his former tactics would be of no avail, and he pleaded guilty to one additional charge. In the two cases tried by jury he was fined $300 each, and in the case where he pleaded guilty Judge Fry sentenced him to six months in the House of Correction and fined him $200, making the aggregate fines $800.

Details of the cases against Hustion are given to illustrate the trouble and delay to be expected in cases of cocaine selling where the dealer is supplied with money.

Some time in August, 1911, Hustion purchased a stolen automobile from a well-known sneak thief and pickpocket, who told the fact to a west side police officer; men from the Desplaines Street station made a raid upon Hustion's house, secured the automobile, and took away eighteen or twenty dress-suit cases supposedly containing stolen goods.

TWO RAIDS.

Hustion claimed that among other things taken at that time was a large quantity of cocaine and Gray's Catarrh Remedy, which was never returned to him. This was denied by the officers making the raid, and inasmuch as no inventory was made of the property taken, and he subsequently receipted in full for all of the property alleged to have been taken in the raid (except the automobile), the fact could not be proved that the police had taken and resold the cocaine, as he claimed.

On the complaint of several railroad special agents, Hustion's place was again raided on October 3, 1911. At this time a quantity of watches, jewelry, opium, and other property was taken by the police. Hustion again claimed they took quantities of cocaine from him, but that has not been verified. He further claimed that the amount of opium taken from him was nine cans, valued at $85 per can, and that when the opium was turned over to the United States Government by one of the officers making the raid but six cans remained. It was conclusively proved that Hustion's statement in this regard was correct and that this officer had removed three cans of opium from the package. What became of it has not been learned.

SOURCES OF SUPPLY.

Every effort was made to ascertain from Hustion his source of supply. He admitted that he had purchased Gray's Catarrh Remedy (which contains cocaine) at the rate of five gross per month from a dealer in Jersey City. Some of his memoranda indicated that he had dealings with a well-known retail drug company, but that could not be verified.

Hustion finally admitted that for about a year previous to his conviction he had purchased cocaine from a man who was formerly manager of a well-known wholesale drug house in another State, and that in eight or nine months had purchased $3000 worth, or 600 ounces. He usually purchased it in 100-ounce lots. This would make his average sales about 66⅔ ounces per month.

DISTRESSING RESULTS OF DRUG HABITUATION.

Hustion's case illustrates two phases of the pernicious character of the cocaine habit—first, its inimical connection with crime, and second, the moral breakdown of the user. The striking contrast between the exterior and interior of Hustion's home illustrates both these phases. The luxurious furnishings were practically all received by him in exchange for the drug. One promising young man but recently married, living in an apartment comfortably furnished by the parents of his wife, took practically every bit of these furnishings, piece by piece, to Hustion's house and traded them in for cocaine at a fraction of their value.

In one corner of the kitchen there were stacked carpenters' and plumbers' tools and tools of other skilled mechanics; hanging in masses on the backs of nearly every door and in closets were expensive silk and satin dresses, furs and linens; scattered through the house were dress-suit cases and boxes containing wearing apparel, jewelry, watches, and goods of every description. Neither Hustion nor his wife knew how much property there was in the house, but a person well qualified to judge and who examined it at the time of the second raid made by the police, stated that in his opinion the value of the property in the house at that time was nearly $15,000. A good portion of this property was undoubtedly stolen, as cocaine users, being absolutely unreliable, can never get steady employment, and naturally turn to theft. Among the regular patrons of Hustion's place were a number of well-known pickpockets and other thieves.

It ought to be explained, perhaps, that the work of discovering and prosecuting this and other offenders was done by the Chicago Civil Service Commission instead of the State Board of Pharmacy, because the latter had no funds with which to operate.

"MY BEST PAYING SIDE-LINE."

The Eighth of an Important Series of Articles by Different Druggists, in which Each Writer Tells what Class of Goods Has Paid Him Best—Post-cards were Found Most Remunerative by this Proprietor.

By A. E. PRATT,
Waukon, Iowa.

Some years ago when post-cards had quite a sale in the cities but had not yet found their way to the smaller places, my wife said to me, "Why do you not put them in as a side-line in your store?" I replied, "I consider it a very short-lived fad and I do not care to bother with it." But I was persuaded to put in a few and try them out.

SCATTERING MY PURCHASES.

Very much to my surprise they sold quickly, and it was up to me to decide whether I cared to continue the card business or not. Luckily I jumped the right way. I immediately got busy studying the ways and means whereby I could replenish my stock quickly with suitable and salable goods. It did not take me long to discover that the true secret of the post-card business was in having a well-selected stock which necessitated frequent purchases and not too many of one design. As there were other firms in town selling cards, I felt that I must at once impress the public with my desire to keep on top in the card business. I therefore devised the plan of scattering my purchases far and wide, thereby obtaining the new and attractive cards as they came out. The complimentary remarks that frequently came to my ears from customers regarding my ever new and changing assortment convinced me that this plan was correct. I bought cards not only in Chicago and other near-by points, but also in New York City, Philadelphia, St. Louis, Louisville, Topeka, and Denver.

RECORD OF SALES.

As time went on I became more and more enthusiastic over my new side-line, feeling that it was just about the best I ever took up. In fact, it became so fascinating that I decided I would keep a weekly record of sales. At the close of my first year my record was $907.25, which means an average weekly sale of $17.50, and an average daily sale of $2.93.

My second year was $783.03, with an average weekly sale of $15.06 and an average of $2.50 a day.

My third year was $602.02, with an average weekly sale of $11.58 and an average of $1.92 a day.

My fourth year was $548.91, with an average weekly sale of $10.55 and a daily average of $1.43.

It will at once be observed that there was a dropping off in sales from the first record-breaking year which can be accounted for in two or three ways. In the first place, there were more places in town selling cards. Then, too, in my first year or two in the card business, there were a good many novelties retailing at 5, 10, and 25 cents. Leather cards, in the days of leather pillows and purses, were in the height of their sale. These retailed at 5 cents, and together with the novelties helped to swell the volume of business. But notwithstanding the dropping off in the business, I still consider it a good substantial side-line for any druggist.

I found that it brought hundreds of customers to my store who might not have come but for the fact that they knew they could always find the largest and best selection of postals at my store to be had in this corner of the State. The figures I mentioned would be nothing for some dealers. But for me, considering the town and my situation, the showing was fine.

I have the honor of having sold $3841.21 worth of cards in four years, which means an output of from 100,000 to 110,000 cards, and I know that no other dealer in my county can make the same claim.

This output was carried on continuously on an average investment of about $50. My average profit has been about 100 per cent. So it will be seen that the profit has paid my rental.

HOW TO HANDLE CARDS.

My method of handling cards is somewhat different from that of the average dealer. It

differs too from that suggested by the card jobber, being more like the department store plan. About one-half of a twelve-foot showcase is covered with local views, each assortment being held together by a rubber band. I have a row of wire baskets; first one containing 10-cent birthday cards; next one holding 5-cent birthdays; then the 2-for-5-cent miscellaneous, and 3-for-5-cent miscellaneous. Then comes my 1-cent basket.

PENNY CARDS.

I know it is quite contrary to the business belief of many dealers to handle penny cards, for the reason that they hurt the sale on the higher priced subjects. While this may be so to some extent, I must say penny cards have their advantages, especially in a town in which there is a so-called "racket store." In the first place a penny basket is one of the best drawing cards one can have for his store. Secondly, one can put the unsalable and soiled cards into the 1-cent basket with the assurance that they will not be there long.

In using the wire basket system one must not neglect placing a good-sized price-card at the head of each basket so that customers though "deaf and dumb" may read.

For display I use the ordinary card racks and hang them over the card counter, full of the new cards. These I change real often, at least once a week. Frequent window displays serve to keep the people interested and also help to show them the new cards.

Let me say right here that *never* should a suggestive card be allowed in the stock. Consign them all to the fire.

There are three days in the year when card sales can be doubled and quadrupled if the proper forethought is taken to lay in a good salable stock. I refer to Easter, Christmas, and New Years.

Cards to retail at 2 for 5 cents are by far the best to handle. They can be bought at from $1 to $1.25 a hundred, and can be sold at 25 cents a dozen, leaving a good margin.

I advise everybody to get in and become acquainted with "my very best side-line."

WHY SOME DRUGGISTS DON'T MAKE MORE MONEY.*

By HARRY B. MASON,
Editor of the "Bulletin of Pharmacy."

In an address which I have recently prepared at the request of another association, but which has not yet been delivered, I have shown in detail how strikingly at variance druggists are in the incomes derived from their stores.† I have presented the actual facts about 25 druggists who are scattered in different sections, and who therefore represent the average conditions as they are found over the country. The percentage expense of these men runs from 18 to 35! Their percentage of gross profit runs from 31 to 51! Often one man realizes a total income as large as another whose volume of business is nearly twice as great!

Now why do these discrepancies exist? Why does it cost some men so much more than it does others to do business? Why do some men realize a profit so much less than others? Why does one druggist make so much more money than his neighbor on a business of exactly the same size?

The answer to all these questions is simple. Locality and environment have something to do with the problem, it is true, but in the last analysis, and in the great majority of instances, the fundamental reason is that some druggists are poor business men—that's all. They don't study the game. They haven't mastered the rules. They aren't skilful in playing their cards, and—worse yet—they make one blunder after another without ever knowing it.

Now what are some of these blunders?

1. *They don't keep business accounts.* This is the day of science in commercial operations, when every large business house, in whatever line of trade, is making a close study of business economics, and yet many druggists are nevertheless following the good old-fashioned

*Address delivered by invitation before the Chicago Branch of the American Pharmaceutical Association, May 21, 1912.

†This has since been read before the Iowa Pharmaceutical Association and printed in the September BULLETIN OF PHARMACY.

method or lack of method of spending what accumulates in the bank account and fancying that it represents net profits. Hundreds of such men have discovered when it was too late that they were eating up their principal without knowing it, and that accumulated dead stock, decreasing inventories, and bad book accounts had cut into their imagined profits so far as almost to destroy them entirely. The sheriff has had to come along and close them up before they tumbled to the situation. A druggist who does not keep careful business records is not in position to know anything at all about the amount of money he is actually making. He is simply asleep at the switch.

2. *They don't take inventories.* The druggist who does keep business records, but who fails to supplement them with annual inventories, isn't much better off. In Philadelphia not long ago two brothers bought a store which had previously enjoyed a very good trade, and which was pretty well stocked. The first year the new owners thought they were making all kinds of money. They increased their living expenses and plumed themselves with the thought that they had finally landed on their feet. Over a year went by, perhaps indeed two years, before it began to dawn on them that they had been gradually decreasing the stock in the store, and that much of the money which they thought they had been making as profit was literally taken out of their capital. An inventory would have prevented them from making this mistake.

A druggist in Missouri, who submitted his business statement to us for two or three years in succession, was finally induced to begin invoicing his stock annually. What was the result? He discovered the very first year that his assets increased to the extent of $1600. If he had taken no inventory, and if he had based his calculations upon purchases and sales alone, his figures would have been grossly inaccurate. To be sure this particular druggist would have erred on the safe side, but the very next year the situation might have been approximately reversed.

More striking yet was the case of an Arizona drug firm from which we received a statement indicating net profits during the year of $1256.31. The inventory had been taken, but it had not been figured up and compared with that of the year before. When we received the inventory figures for both years, and carefully went over the entire statement again, we found that this Arizona firm, instead of making a net profit of $1256.31 during the year, had actually lost $716.60!

Instances like these might be multiplied—but what's the use! As I have said on other occasions, I have been brought in contact with numerous cases where the inventory figures have disclosed differences in the value of the stock to the extent of anywhere from $200 to $2000, according to the size of the store and the nature of the circumstances. The stock in any store is constantly shifting; the prices are forever fluctuating; the fixtures, and particularly the soda fountain and its appurtenances, are always undergoing depreciation, and the druggist who is not aware of the exact nature and extent of these changes is not in position to know where he stands. He may fancy his percentage of gross profit to be 40 when in fact it is only 30, and he may consequently be losing money on many transactions which he fondly believes are yielding him good returns.

3. *They don't know how to figure profits.* There are many druggists who do keep business records, and also take inventories, but who blunder strangely in the calculation of profits. A very common mistake is to figure the percentage expense of doing business on the volume of sales, which is right, and then to figure the profit, not in the same way on the selling price, but *on the cost.* It is true that ordinarily, in every-day language, profit estimates are based on the cost price. This is the method we are taught in school, and it is the method most frequently met with in the advertising announcements of manufacturers. A manufacturer, for instance, who sells you an article at $1.00, the retail price of which is $1.75, will tell you that you are making 75 per cent profit. This is legitimate and right, but the wise merchant must thoroughly realize under such circumstances that *he is considering a profit based solely on cost,* and when he comes to apply the figures in his own business, *he must understand the necessity of converting them to the other system and basing them on the selling price.*

Expenses are nearly always estimated from sales—this is almost a universal custom. If, therefore, the profits are to be compared with the expenses, they must both be figured by the

same method. Suppose you pay $1.00 for a certain product and you desire to make 35 per cent on it gross. It costs you 25 per cent, we may assume, to do business. You want to make a 10 per cent net profit beyond that for yourself. Very well, then, what should the selling price be on this article which costs you $1.00, and on which you want to make a gross profit of 35 per cent? If you make the common mistake of basing this 35 per cent on the *cost* price you will sell the article for $1.35, but if you do let us see how you will come out. It will cost you, as we have already assumed, 25 per cent of the *selling* price to handle the article. Now 25 per cent of $1.35, the price you place on the product, is 34.75 cents, so that you are selling for $1.35 an article which cost you $1.34¾, and while you flatter yourself that you are making a net profit of 10 per cent, you are practically breaking even on the transaction!

There are hundreds of merchants—perhaps thousands of them—who are figuring their profits in this erroneous manner. Some months ago the Burroughs Adding Machine Co. published an advertisement in one of the national magazines requesting answers to the following question: "A certain article costs $1.00 wholesale. What will it have to be sold for to allow a net profit of 10 per cent, after allowing 22 per cent for the cost of doing business?" Something like 1000 replies were received, of which 750 were wrong. The answers ranged all the way from $1.10 to $1.60. The majority gave the selling price as $1.32, notwithstanding the fact that an explanation was printed at the bottom of the advertisement declaring this answer to be incorrect. The very common mistake was made by these men of basing their percentage expense upon the selling price, their percentage of profit on the cost price, and expecting they would get accurate results. This was the whole source of the trouble.

Here is the proper way to tackle a problem of this character: The article costs $1.00. Your cost of doing business is 22 per cent, and you want to make a net profit beyond that of 10 per cent—a total of 32 per cent. The cost figure of $1.00, therefore, represents 68 per cent of the final selling price. Is this perfectly clear? Suppose, again, your expense is 40 per cent, and you want to make a net profit of 10 per cent. You would then have to realize a total profit on the selling price of 50 per cent. Now considering 100 per cent as the final price you get, and subtracting 50 per cent of this for profit, you have left a residuum of 50 per cent for cost, and the $1.00 which you pay for the article therefore represents 50 per cent of your selling price. You must consequently double the cost and sell the article for $2.00 if you want to realize your 40 per cent of expense and your 10 per cent of net profit.

Reverting now to the first example which I mentioned, that of an article which costs $1.00, and on which it is desired to make 35 per cent gross, it may be seen right away that the cost is 65 per cent of the desired selling price. Your problem may then be stated as follows:

$$\$1.00 : 65 :: X : 100,$$

and the answer is $1.54. Instead, therefore, of selling the article for $1.35, you sell it for 19 cents beyond that. And this 19 cents means just the difference between making money and losing it. It means the difference between figuring profits correctly and figuring them incorrectly. It means the difference between ignorance and wisdom.

In this connection a few rules may be of assistance. In order to make a profit of 16⅔ per cent of the sale price, add 20 per cent to the cost; for a 20-per-cent profit add 25 per cent; for a 25-per-cent profit add 33⅓ per cent; for a 33⅓-per-cent profit add 50 per cent; for a 40-per-cent profit add 67 per cent; for a 50-per-cent profit add 100 per cent.

4. *They lose money without knowing it.* Partly because of the inaccurate method of figuring profits which I have just been considering, and partly because department records are not kept, many druggists fail to realize a profit on some of their goods. It is pretty well known that patent medicines, for instance, bought at 68 cents and sold at 80 or 85 cents, very frequently fail to reimburse the druggist even for his cost of doing business, to say nothing of yielding net profits. But it is less frequently known that sometimes even the candy and cigar departments are poor profit makers.

Some years ago we had a statement from a druggist in the West whose annual business amounted to a little over $16,000. He kept careful department records and he found that

his annual soda sales were nearly $4000, his cigar sales over $6000, and his candy sales something like $1600. The soda business yielded him a gross profit of 35 per cent, the cigar business 16 per cent, and the candy business 25 per cent. Now his percentage expense was 28, and it was even 23 when, for purposes of calculation purely, his own salary as proprietor had been eliminated. He found, therefore, that he was losing money on his cigar business. Without considering his own salary at all as part of his expense, he was still losing 7 per cent, failing by this margin to make any profit whatever toward his own living, letting alone the question of surplus profits. Even his candy business, netting a profit of 25 per cent, lost money for him. It paid a little toward his salary, it is true, but it failed to measure up to his total real expense of 28 per cent.

I haven't any doubt at all that much the same thing would be true of many drug stores throughout the country. It doesn't follow, however, that because a given line is failing to yield adequate profits, it should be thrown overboard. When I read a paper on this subject before the Michigan State Pharmaceutical Association last year I was taken severely to task by one or two speakers who misinterpreted my position. They assumed my argument to be that goods which didn't yield a profit shouldn't be carried in stock. They declared with perfect truth that it costs more to sell some goods than it does others. A patent medicine, for instance, which can be quickly wrapped and passed out over the counter can probably be handled for one-third the expense of a prescription. Much the same thing is true of cigars, which are sold with a good deal of rapidity. It is therefore scarcely fair to charge up against such things the average percentage expense of the whole business.

Furthermore, some things have to be carried even if they do lose money. This is noticeably true of patent medicines. It may even be true with cigars and candy, for if you throw out a given department, and put nothing else in its place, you are reducing your volume of sales and thereby increasing your volume of expense. You are therefore jumping from the frying pan into the fire. Charles H. McConnell, proprietor of the Economical Drug Store in this city, whose daily sales exceed a thousand dollars, found many years ago that his soda and cigar departments were actually losing money for him, and he promptly abandoned them. But it was possible for this aggressive man, with a fine down-town location, to take a radical step of this kind when it is frequently not possible for a small druggist in an outlying suburb. Mr. McConnell was able to keep up and even increase his volume of sales by a more energetic drive on other features of his business, but this the small druggist cannot always do.

Some one might reply, then, what's the use of all this talk if we must keep our departments anyway? A lot of use! Every man ought to know the facts about his business. In the first place, if he finds that his candy department isn't yielding adequate profits, he can change the selling prices, or the character of the goods, in such manner as to come out whole on the business, and he can perhaps find leaks and stop them up. The same thing is true to a limited extent with the cigar department. In the second place, if a druggist realizes that he is making a low profit on a good many things in his store, he then understands the vital necessity of putting in such additional lines, and of getting such increased profits elsewhere, as will bring up his *general average* of profit. It must be obvious to every merchant that as *few* goods as possible should be sold at a gross profit below the percentage expense, and as *many* as possible above it. By no other rule can a satisfactory average be yielded. If it is necessary to carry a lot of stuff that pays indifferently, the thing to do is to expend a little gray matter in planning to put in other things that will pay handsomely and bring up the average.

5. *They don't keep the percentage of expense and the percentage of gross profit far enough apart.* This shortcoming grows out of what has been said already. I found from the statements of the 25 druggists to whom reference has been made that the average percentage of expense was 24½, and the average percentage of gross profit 38⅜. This means, in round numbers, an average *net* profit of 14 per cent. Every druggist should strive to keep his percentage of expense and his percentage of gross profit this distance apart from one another. Make your business yield 14 per cent net on the average if you can. Hold this up to your-

self as an eminently attainable ideal and strive in every way to realize it. Others have done it—you can. Don't be satisfied with anything less. If you are, then you fall to this extent below the general average reached by druggists throughout the country.

It is my conviction that the net profit ought never to fall below 10 per cent at the worst. Anything between this figure and the general average of 14 per cent might possibly be considered fairly satisfactory. But if 10 per cent is not realized, then the business needs to be looked into most carefully. Throw the searchlight on it in every detail. Conduct an investigation of the most earnest character—and don't neglect to appoint yourself your own most heartless and ruthless critic.

The difficulty of the problem must not be minimized. In striving for an average gross profit of 38 per cent—one might better make it 40 while he is at it—it will be found that many things will have to be marked up to a selling price once, twice, and occasionally three times the cost price. As Charles R. Sherman, the shrewd pharmaceutical merchant of Omaha, once said: "One of the most important points in the conduct of a business is knowing where to put the profit on, and while 20-per-cent profit would be all the traffic would bear in some instances, 80 or possibly 120 per cent on another article would seem no more burdensome to the purchaser and would really be just as legitimate."

It must be understood that 40 per cent on the selling price is the equivalent of 67 per cent on the cost price, and that in realizing an advance of 67 per cent over the cost of an article, you are putting on "all the traffic will bear" in many cases. But since this is to be your *average* profit, and not your *maximum* profit, and since you have to sell a lot of things at 15 or 20 per cent, you must summon up your nerve and tack on the advances wherever the weight can be borne. This is positively the only way you can break even. Remember this finally: If it costs you 25 per cent to do business, which is the general average the country over for retail druggists, this is equivalent to 33⅓ per cent on the cost figures. When, therefore, you buy an article for $1.00, and sell it for $1.33⅓, you are simply paying expenses and haven't made a cent! Don't forget this—it's a good thing to remember! A selling price of $1.33⅓ on an article costing you $1.00 hasn't netted you anything!

6. *They don't take advantage of their cash discounts.* Few druggists realize how much money they can save by availing themselves of cash discounts as they should, nor do they comprehend thoroughly that if they can cut down the cost of their goods in this manner they are certainly adding that much to what is yielded by them on sale. In a paper read last year I gave the facts about seven pharmacists who had always made it a practice to discount all their bills. The annual amounts saved by them were as follows: $150, $186, $301.26, $600, $600, $1000, $5000. Since that time two or three other druggists have written me about this feature of their business. A physician out West, who owns a drug store but who hires a manager to conduct it, told me that with a business of about $10,000 a year he was saving on an average $150 annually by discounting all his bills. In his case this meant an enlargement of the total net profit realized from the business of something like 8 per cent! In another case, that of a Michigan druggist, $196 was saved last year in cash discounts. A saving of $196 a year is equivalent to the net profits on sales amounting to $1500 or $2000—in other words, one would have to increase his business to this extent to make as much money as he can make without any trouble whatsoever by merely taking advantage of his cash discounts. And yet druggist after druggist goes to sleep on this opportunity, and pays anywhere from 1 to 4 or in some instances 6 per cent more for his goods than he should.

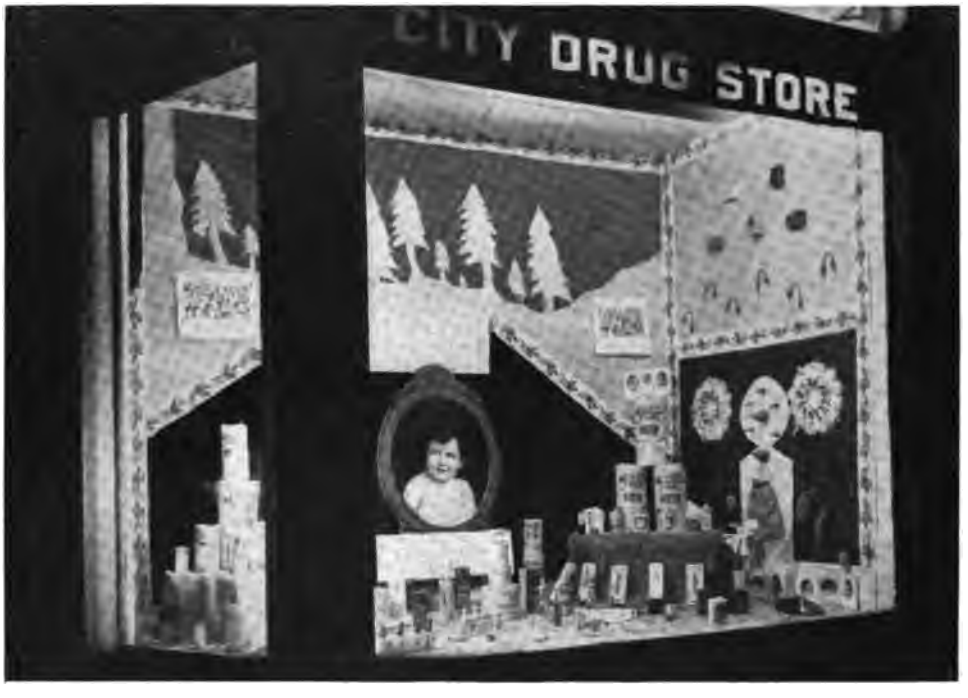
These are a few of the reasons why some druggists don't make more money. I haven't tried to exhaust the whole catalogue of shortcomings—but I have already talked long enough. Neither do I mean to suggest for a minute that druggists are any worse than other retail merchants. They aren't. But I am convinced in my own mind that as a class they do not make that close economic study of their business which the times demand. They are scientific pharmacists—but they are not scientific business men. Modern business is just as much of a science as astronomy or biology or engineering. The old loose and slipshod methods won't go—we are either up-to-date or out-of-date.

A DISPLAY OF BABY NEEDS.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Some time ago we tried the plan of filling the window with the different articles intended for infant use. In the center, mounted on an easel, appeared the picture of a bright, healthy looking baby. A sign just below read, "The picture of health—an Eskay's Food Baby."

The upper background was heavy green ingrain paper worked over the lower border with heavy white paper. The latter was cut away to represent an outline of evergreen trees. The side wall was green above and red below. All over the edges of the background



Around the youngster were arranged an assortment of all the things he might want. There were nursing-bottle fittings, nipples, pacifiers, brushes, chamois skins, talcums, soaps, bottles, assorted baby foods, castor oil tasteless, ear and ulcer syringes, vermifuges, antiphlogistine, castoria, croup remedy, etc.

and the side wall appeared a narrow border of holly.

This trim caused considerable comment and brought us some good sales on the articles displayed.

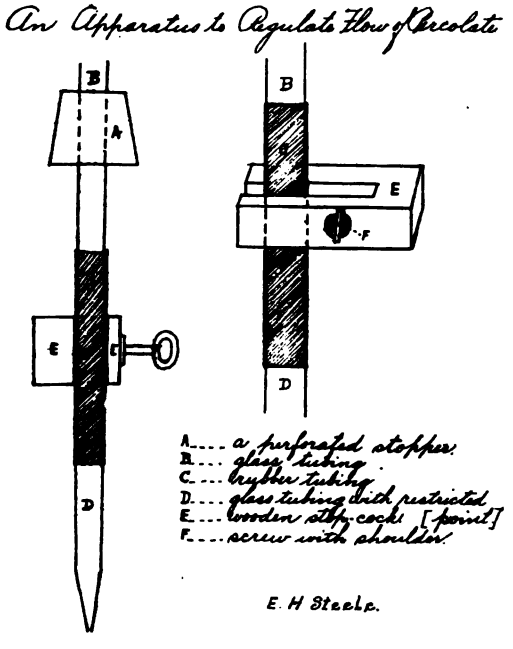
Others could doubtless try this plan to good advantage.

DOLLAR IDEAS

REGULATING THE FLOW OF A PERCOLATOR.

E. H. Steele, Washington, D. C.: Here is a diagram of an apparatus designed to regulate the flow of the percolate in the manufacture of tinctures, fluidextracts, etc. It serves the purpose so efficiently, and is so simple, inexpensive, and easily constructed that I thought it not altogether unworthy of a place in your columns.

It consists of six simple parts. There are a perforated cork or rubber stopper, a short



piece of glass tubing to fit same, a short piece of rubber tubing that will fit snugly over end of the glass tubing at one end and receive a glass tube with constricted point at the other. An ordinary eye-dropper answers admirably for the latter tube. Astride the rubber tubing is a wooden stop-cock with screw. This furnishes a means of regulating the flow to as few or many drops per minute as desired, by simply tightening or releasing the screw.

The stop-cock is fitted with a screw having a shoulder, and is made from a small block of tough wood by sawing in from one end a sufficient distance to accommodate the rubber tubing and allow the screw to be inserted behind it. The incision should be made sufficiently close to the side of the block to render the outer portions susceptible to the influence of the screw. In other words, the outer portion must be thin enough to spring readily.

If tough wood is not obtainable, an ordinary piece may be used and fortified with a wire wrapped tightly around the closed end.

TO TELL CUSTOMERS "WE HAVE IT NOW."

C. J. Wall, Grapevine, Texas: I submit a printed postal card I have used for several years to great advantage. When a customer calls for an article that I am out of temporarily, or have not been carrying, I take his name and order the article. When it arrives I drop the buyer this post-card, and it usually brings him back for the goods. The card used is an ordinary government post-card printed on the back as shown, with a blank left for the name of the article.

GRAPEVINE, TEXAS.

DEAR FRIEND:

A few days ago you called for _____ which I was then temporarily out of. I now have it in stock and would be pleased to furnish it to you.

Yours truly,

C. J. WALL,
Druggist.

What You Want, When You Want It!

MAKE THE BANK BOOK SHOW!

Daisy A. Frick, Audubon, Iowa: The bank deposits should represent the cash taken in. It is frequently customary to pay small bills out of the cash drawer instead of writing checks. But I aim to pay all bills by check, although there are still many occasions when it is advisable to pay the cash out of the drawer—for example, express charges, dray and messenger fees, etc. At the end of the day sum up total expenditures of the kind and replace the amount with a check, depositing it the same as cash. This makes the bank-book show the total amount of cash business.

ACIDS IN PERFUME BOTTLES.

Lester E. Lenrow, Newark, N. J.: One-pound perfume bottles with glass stoppers make excellent acid bottles for shelf use. After gathering together a sufficiently large number and filling them with the different acids from our stock, we were more than repaid for our trouble by the convenience of having a neat set of uniform shelf bottles that could be handled with great ease.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

COMMISSIONS IN THE NAVY SECURED AT LAST!

To the Editors:

The rank of Chief Pharmacist with commission in the United States Navy is now an assured fact. Those eligible for promotion are merely awaiting the order to appear for examination. We quote from a letter just received from one of the navy pharmacists:

"Anything like an adequate expression of our thanks for your long, hard fight in our behalf is, I think, beyond the ability of any

Dr. Geo. F. Payne.

of us, and I, for one, shall not attempt it. I shall merely say that the pharmacists in general, and especially those of us who have been long enough in the service to know of your work from the beginning, appreciate what you have done for us, and that on my part the somewhat feeble expression 'I thank you' is all that I will use at this time. The duty of the American Pharmaceutical Association to the pharmacists of the naval service is, in my opinion, done and well done, and the credit of the same is all yours."

The credit isn't all ours by a long shot. Hurrah for the pharmacists of the American Pharmaceutical Association, and their brother pharmacists of the whole United States, who have battled so unflinchingly for proper recognition in the United States public service! Everybody almost without exception did his duty by his profession when called upon by the chairman. We wish that we could thank everybody adequately. Many exerted a powerful influence by their interest and good-will when they did not realize the amount of their efficient work. We thank everybody heartily and sincerely, and wish that we were able to give the whole bunch a trip through every State in the Union to further help the coöperative work of promoting the professional advancement of pharmacy. Respectfully,

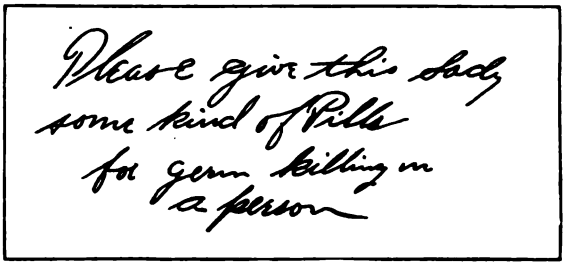
GEORGE F. PAYNE.

Chairman of the Committee of the A. Ph. A. on the Status of Pharmacists in the Public Service of the United States, Atlanta, Ga.

ANOTHER PUZZLER!

To the Editors:

One night a young man came into the store and handed me this note. Being unable to speak English, he left me in a rather peculiar position. What would you dispense? I dispensed two dozen of P., D. & Co.'s 2-grain Phenolphthalein Tablets and wrote upon the



box: "Take two pills each evening before retiring as needed." I am inclined to think that he wanted something of this nature as I haven't seen him since.

Let me say finally that the BULLETIN contains more up-to-date reading matter than any other drug journal I know of.

Detroit, Mich. MAHLON K. SMITH.

WHAT HE WOULD CHARGE.

To the Editors:

In the September issue of the BULLETIN, in the department of "Letters" on page 389, I noticed the following prescription:

Sulphonal .....1 drachm.
Divide into 5 powders.

The druggist who submitted this prescrip-

tion asked for suggestions regarding the price of it. I thought it would be of some interest to him and to the editors of the BULLETIN to hear from me, and therefore let me say that I would ask about 25 cents for such an order. FRANK FRIDGEN.

La Crosse, Wis.

REGARDING TWO ARTICLES IN THE SEPTEMBER BULLETIN.

To the Editors:

Your correspondent from Oakland, California, whose letter was reproduced on page 389 of the BULLETIN last month, should have lived in the South. If he had been so fortunate of location as to live almost anywhere in this part of the country he would have had no trouble whatever in knowing that "Black and Tan" is a copaiba mixture used largely by the colored population for purposes which are doubtless known to all pharmacists!

I observe, too, that the E. D. Co. ask on page 396 of the September BULLETIN about a dye for shaving-brushes. Let me suggest the following: Wash the shaving-brush first in benzine, then immerse the bristles in a 5-per-cent solution of potassium sulphuret, and, after drying them thoroughly, in a 10-per-cent solution of silver nitrate, subsequently exposing the brush to bright sunlight until it is dry. It will then be found to be a beautiful jet-black. A high luster may be obtained by rubbing it with a very small quantity of vaselin. Care, however, should be taken to keep the hands out of the different liquids by means of the use of tissue-paper.

Complimenting the BULLETIN OF PHARMACY on its several excellent and interesting features, I am, very truly yours,

Glencoe, Okla. W. SCOTT SAMUEL.

WHAT DID HE WANT?

To the Editors:

I am sending you an order received not long ago in this store, and I wonder if most druggists could tell what the man wanted. We found that he was after hydrogen peroxide.

Lodi, Cal. SAM H. ZIMMERMAN.

To the Editors:

Your drug journal is certainly the best I have ever read. HENRY J. KAMPHUIS.

Fulton, Ill.

A GRADUATING CLASS IN PHARMACY.—These young men got their diplomas this spring from the Department of Pharmacy of the University College of Medicine in Richmond, Va. The school has just moved into a new fireproof building, modern in equipment, and the outlook for larger classes and wider influence is reported by Secretary Wortley F. Rudd to be very bright.

THE SODA FOUNTAIN.

USING SIGNS AND WINDOW CARDS.*

By Sterling Miller.

Here is my experience on "How to Operate a Small Soda Fountain on a Money-making Basis." The first step to take to operate a small fountain on a money-making basis is to employ a neat, clean, bright-looking person. Most likely he will ask his desired salary; offer him a little more, and you will find he will be delighted and take more interest in his work and the sales will increase at your small fountain. As the business increases give him a little more salary or a small commission for the busy season, and in a short time you will find that you will have to employ extra help.

To advertise your sodas, frappes, sundaes and specials, have plenty of fancy cards suspended from your fountain back-bar. Make a new drink or an ice-cream delicacy every day, and you will find your patrons will look and ask for something new each time they call at your fountain. Have some attractive and fun-making cards for your customers to comment on and laugh about. Suspend from the back-bar designs in this manner:

WILKES-BARRE SUNDAE,
10c.
One Actress,
One Johnny,
One Taxicab,
One Supper Mingled with Cocktails,
Two Down-and-Outs!

A GOOD DEAL
for 15 Cents.

Display a good Euchre Hand.

EUCHRE FRAPPE.

IT IS A CHESTNUT,
but it is a good one.

Try it To-day as our
FOUNTAIN SPECIAL.

On all big days such as holidays have a special window sign appropriate for the occasion, printed in this manner: "Circus Frappe," "Baseball Frappe," "Football Frappe," "4th July Sundae," "Christmas Snowball Frappe," and "Easter Sundae." This will arouse the curiosity of the dainty-seekers and bring the crowds to your store.

When buying your fruits and syrups, buy in small quantities, so they will always keep fresh and delicious; always keep one or more bowls of fresh fruits on the back-bar, such as fresh pineapple, fresh strawberries, etc., in season; have plenty of fresh eggs in sight with a printed card "Strictly Fresh Eggs Used at our Fountain."

Never contradict your customer. If he says the milk in his egg drink tastes sour, don't say you don't think it is, because you just received it from the dairy. Instead, offer him something else or return his money. The chances are he will see you are trying to please and ask for something else.

Serve some nice dainty cake with your ice-cream sundaes and frappes. This will bring you many steady customers. Make your soda and ice-cream concoctions neat in appearance. Always have a large bowl of orangeade on your fountain counter, for this is very appetizing and a big money-maker. Make your fancy concoctions in front of your customers and this will help to advertise them. Specials lettered in water-colors on the mirrors will help sell them. Always try and have something new and different at your fountain.

Have a nice bouquet of flowers on your back-bar. Two or three palms or ferns are always attractive at the fountain or near-by; and a punch bowl of fresh fruit in the center of your back-bar filled with lemons, oranges, bananas, peaches, etc. Keep your soda glass holders polished as well as the soda fountain. Use the best ice cream that is made in your city or town, and this will help to advertise your business.

A neatly decorated window of fruits, syrups, and fresh fruits should be on display in your store window about once a month. Keep your counter and tables clear of all unclean glasses and dishes—dishes which in many cases will spoil the appetite of your customers. The profits of your fountain can easily be thrown away by using excessive ice cream, syrups, and fruits.

Have a neat menu on your tables and counter. Change the menu card every day so that it is always clean. There is nothing more offensive than a menu all spotted with soda water. In printing your menus have a line at the bottom reading in this manner:

Special To-day,

CANTALOUPE FRAPPE, 15c.

Always make a special effort in catering to the women trade, as in general they all like something dainty and tasteful.

"Sweets for the Sweet."

During the winter months serve a nice line of hot drinks, such as hot chocolate, tomato bouillon, etc., serving each with two or three fancy cakes or crackers. This is also a drawing card for your fountain during the cold weather.

Three years ago I was employed by H. C. Tuck & Co. to build up a soda trade at their fountain, which had been lingering along with small sales and profits for several years. The first day I went behind the fountain I made cards and strips for the back-bar and windows stating that our delicious sodas are 5 cents, sundaes and frappes 10 cents, etc. In a short time the sales of our fountain began to increase day by day. Then more help was the next step to take care of the trade. To-day I have a money-making fountain, gained by using the above methods. I find by reading *The Soda Fountain* magazine each month any person interested in the soda business will find a great deal of knowledge on how to operate a "Small Fountain on a Money-making Basis."

*This article was awarded a prize of $10 by *The Soda Fountain.*

IT PAYS TO KEEP ACCOUNT OF COSTS.

There is little need of argument to convince those who have been through the experience that it pays to keep cost accounts, even in the soda business. Accounts well kept stop leaks, but they do more than that, by

presenting suggestions for the enlargement of business. In keeping a soda-water cost account, one should make note of the weather, the special occasion, such as holidays, local excursions and the like, and other data that are likely to be valuable in making comparisons.

By stopping leaks, we mean, for instance, that the cost sheet should show whether you are getting all you ought to from each gallon of ice cream. Let us suppose that last Friday averaged $2.10 a gallon for the ice cream consumed, while yesterday's was $2.75 a gallon, with the total volume of business so nearly the same that mere volume could not have made the striking difference. An inquiry is started at once. A deficiency in refrigeration is developed and checked in time—or perhaps it is the quality of the cream when it is delivered to you. At any rate the inquiry is set on foot, which is the principal thing. For it is a poor business man who can't find out where a leak is when once his attention has been called to it.

A little additional pains, that need not be taken every day, but once in a while may afford an excellent test, is to keep an exact account of the number of drinks of each kind sold. This requires a good deal of special preparation, but is worth the trouble, say, once a month. It gives one a better "line" on his trade than anything else can do. It shows just what drinks are making the "hits," and to the observing man it ought to almost tell why. And this ought to point the way to enlarging in the more profitable directions.

SOME STARTLING COMPARISONS.

It is well known that the higher priced drinks yield a higher percentage of profit than the lower priced ones. Sixty per cent, say, of the checks of a day's business may be five-cent ones, yet they will produce less than 40 per cent of the income from sales. Thirty per cent may be ten-cent checks, yet it will be discovered that they produced 43 per cent of the gross business. And the business of the higher priced checks was accomplished with little, if any, additional charge for attendance. Service time runs about equal, or very little more, in the higher priced business. In a typical cost sheet we have in mind, it was found that it required seven times the service in the case of five-cent customers to produce only a little more than twice the gross receipts that accrued from sales of ten cents and over. The disclosure of the relation of the service cost to the amount of the check is important, not only for the additional profit it ought to call attention to, in possibility, but because it gives incentive for a development highly desirable from every business point of view.

ADVANTAGES OF KEEPING ACCURATE ACCOUNTS.

If comparing one week with another and one month with another are desirable practices, then it will be found, too, that the comparison of days in different years will pay, when the system has become established. For example, when the record of one year shows that the introduction of hot sodas in November accomplished the double result of increasing the sales over those of April and of doing it with less consumption of ice cream, the lesson for the following season will be obvious.

The aim should be to get full returns for the stock handled, to study the needs and demands of the trade, and to check income and outgo, with the purpose of maintaining the highest possible standard of efficiency, and to stop leaks and prevent their recurrence. To accomplish these results the accounting system should above all be accurate. Let it start with the record of sales at the fountain. This should be a résumé of the five and ten cent and the special checks classified according to kind. It should show the amount of ice cream consumed and the average returns per gallon of cream. Other facts not easily deducible should be kept in the record.

The daily account of deliveries should show the quantity of every article or commodity entering into the daily business that is bought and enters the store. The relative proportions of syrups, of non-ice-cream dishes of various kinds, of fruit, of egg drinks, should be carefully ascertained and recorded from day to day; and a knowledge of how to read the delivery sheet in connection with the fountain record will be the means of stopping many a leak that perhaps could not be detected in any other way. For under average conditions of accurate dispensing there will be little variation, and this one item presents suggestions that it is important for the proprietor to heed.

Only by keeping accounts carefully, and then paying attention to the lessons they convey, can the owner of a fountain hope to keep his finger on the pulse of his business.—*The Pacific Drug Review.*

THE PHARMACY OF JOHN F. PATTON.—Everybody knows who John F. Patton is. He has always been conspicuous in pharmaceutical affairs in the State of Pennsylvania, and some years ago he was president of the American Pharmaceutical Association. He is one of the leading citizens of the town of York, Pennsylvania, and his store is of course located in that city. Mr. Patton is unmarried, and his bachelor quarters over the store are the envy and discomfort of many a willing dame.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Scientific Scintillations.—

Ultraviolet light may be used to detect traces of sulphide in potassium carbonate. It develops a red luminescence in the sulphide.

Ozone is said to be of value in ventilation on account of its smell and its action on the nerves of the skin, but not on account of any specially healthful properties it imparts of itself.

A mixture of "sodium peranhydrosulphate" and of "chloride of peroxide of sodium" is claimed as an efficient sterilizer of drinking-water, in the proportion of one part to five million of water.

Light decomposes solutions of vanillin, forming dehydro-vanillin, which is less soluble and may deposit. The decomposition is only partial.

Terpin hydrate is formed when a mixture of oil of turpentine, alcohol, and nitric acid is exposed to ultraviolet light rays, and a patent protects its manufacture in this way.

A Frenchman has patented a machine for expressing the oil and the juice from lemons in one operation and collecting them separately.

Colloidal solutions of silicates of lime and aluminum are being employed to decolorize mineral and fatty oils. They are very effective.

Hydrofluoric acid, or acid solution of a soluble fluoride, is recommended for removing iron stains from fabrics.

An English patentee mixes one part of the roasted sprouts of malt with about 30 parts of tea in order to improve the flavor and digestive value of the latter.

The medicinal value of many natural medicinal waters, for bathing as well as for drinking, is now ascribed chiefly to radium emanations in the waters. These emanations are found in most of the famous European waters.

A mixture of one part of lemon oil and two parts of boiled linseed oil is recommended as an efficient furniture polish which applied sparingly "will do more to preserve good furniture than any veneer sold."

Distilled water contains enough bacteria to produce marked irritation and a rise of temperature when the bacteria are killed and the water is injected into the veins or muscles. Use only fresh distilled water for preparing solutions for injection.

Animals whose respiratory and alimentary tracts are kept sterile do not live long though the food is assimilated. The normal bacteria appear to promote oxidation processes which are necessary to life, and destruction of these bacteria brings death of the animal.

Tannin in plants prevents the development of fungous disease, and so protects the plant. In small amounts it appears to stimulate growth of the plant and fruits, but in large amounts it inhibits.

An Italian chemist finds that an anti-pepsin exists in the pig's stomach which under certain conditions arrests digestion completely, and thus accounts for the non-digestion of the stomach. He was not able to isolate this body.

The whites of eggs contain on an average 87.7 per cent of water and 11.89 per cent of organic matter. The yolks contain 49.7 per cent water and 48.8 per cent organic matter, the rest being salts. Both contain a small proportion of sugar—the yolks less than the whites.

In a storage bin containing 1000 tons of raw sugar fermentation occurred in the center and generated enough heat to cause explosion and flame. Only certain forms of fermentation bacteria will generate enough heat to do this.

An apparatus for sterilizing water by ultraviolet rays which can be fitted to any water tap has been perfected in Germany. From 2 to 3 quarts per hour of absolutely sterile water are obtained by it, with an ordinary electric current.

At the Royal Institute there is a sample of colloidal gold made 55 years ago by Faraday, in which there is no sign of settling. The explanation is that the suspended particles are so small that their rate of falling is only about 0.4 inch per year, and that is offset by circulation through temperature changes in the liquid.

Dr. F. Gardner finds from experiments on guinea-pigs that olive and cedar oils penetrate the skin the best of the liquid oils, while goose grease comes first in the list of fats, with benzoated lard second.

An examination of twelve different brands of gelatin sold for food in Germany disclosed arsenic in each, though in very minute amounts. The arsenic comes from arsenic sulphide used in treating the leather from which gelatin is made.

Odds and Ends.—

Metallic thorium is stated to have a stimulating or tonic effect on animal life, but an injurious action on vegetable life, except in very minute amounts.

Camolite, a mineral found in Colorado, Utah, and New Mexico, is a promising source of radium, and it is thought will prove a profitable source of that element.

Gasoline is now being obtained from natural gas by freezing it out. As much as 13 gallons have been obtained from 1000 cubic feet of gas, but the yield is variable.

Botanists claim that the cultivation of plants which contain toxic principles tends to reduce these and to finally evolve a plant which contains none. Cultivated medicinal plants are therefore less valuable than the wild.

The London *Lancet* says that beer acts as a condiment, and aids in the assimilation of food, when taken with meals, resembling beef tea in this respect. In addition about four-fifths of the extracts in beer are themselves assimilated.

Adrenalin increases the anesthetic action of cocaine, of novocaine, and of alypin.

When given food which had been completely extracted with alcohol and ether, mice died in about two weeks. The addition of fats did not remedy this, but lecithin and cholesterol did.

Large doses of radium emanation cause a destruction of some of the white corpuscles of the blood, an excessive excretion of uric acid, a disturbance of metabolism, and irritation of the nervous system.

Osmotic Observations.—

R. R. Bennet, Ph.L., says that hypodermic solutions and eye-washes should always be made isotonic (non-osmotic) to be soothing instead of irritating. A solution of cocaine hydrochloride containing 0.594 Gm. of the salt in 10 Cc. is isotonic, also one containing 0.564 Gm. of quinine bihydrochloride in 10 Cc. A solution of morphine hydrochloride containing 0.37 Gm. in 10 Cc. is not isotonic, but can be made so by adding 0.268 Gm. of glucose. Sodium chloride is not suitable because it tends to cause crystallization. A solution of 0.01 Gm. strychnine hydrochloride in 10 Cc. should have 0.079 Gm. of sodium chloride or 0.442 Gm. of glucose added to make it isotonic. Beta-eucaine hydrochloride, 0.2-per-cent solution, requires 0.82 Gm. sodium chloride per 100 Cc., and a 0.5-per-cent solution of novocaine requires the same. When glycerin is used, 1.75 Cc. of glycerin diluted to 100 Cc. is isotonic. Anything stronger than this is hypertonic and may irritate. Mr. Bennet thinks that remedies for external use, when they come in contact with membranes, as the eyes, abraded surfaces, etc., should be made isotonic so that osmosis will not cause irritation.

"E Pluribus Unum."—

Alcohol is obtained in France chiefly from grapes or beetroots, in Greece from currants, in Germany from cherries or potatoes, in Russia from rye, in Japan from rice, in the United States from corn, in Mexico from molasses or agave. Other sources of industrial alcohol are bananas, pineapples or other fruits which are unfit for market, artichokes, sweet potatoes, and certain leaves which are rich in starchy or saccharine juices. In 1905 over 600,000 gallons of alcohol were distilled from apples in the United States. It is thought that the stalks of sweet corn would make a profitable source of alcohol in connection with canning factories.

Ye Olde Tyme Wisdom.—

In the old-fashioned days comfrey was esteemed as a household remedy, but modern science found no use for it until Dr. Macalister of England showed that it acts as a real stimulant and proliferant to the cells, and that it exercises powerful healing properties. He finds it of value in ulcers, gastralgia, pruritus, etc., and equally useful internally or externally. This action is found to be due to allantoin, which exists to the extent of nearly 1 per cent in the root.

Arsenic Internally.—

Arsenic is found to be a common constituent of vegetables, and is present in most varieties, of course in very minute quantities only. Of 36 vegetables examined by Jadin and Astruc, split peas contained the largest proportion—0.026 milligramme in 100 grammes—with spinach a close second. Of the fruits, apples contained the most—about twice as much as split peas—while pineapples and bananas contained the least.

Easy on Elbows, Hard on Clothing.—

Washing powders containing sodium perborate are very effective for producing white linen, but the perborate is found to rapidly destroy the cloth. Tests show that when 10 per cent of perborate is present in the powder, linen loses 20 to 40 per cent of its strength in one washing, cotton a little more, and woolens 15 per cent to complete destruction. Very thin goods are practically destroyed in one washing.

"Made in Germany."—

Artificial building materials, composed of sawdust or cork-waste cemented into boards or blocks with a solution of magnesium chloride to which magnesium oxide is added, the mixture being pressed into form, have proved very successful in Germany. The combination possesses some of the qualities of both wood and stone, and is useful for floors, roofs, wainscoting, etc.

Patented Immunity.—

A Swiss chemist claims to be able to make a chemical antitoxin which is capable of conferring immunity against infectious diseases, from creatinine. A patented solution contains 0.2 per cent of creatinine, 0.01 per cent of guanidine, and 0.10 per cent of allantoin, with 0.08 per cent of phenol as preservative.

Electrified Calcination.—

Lime and magnesia which have been prepared in electrical furnaces at very high temperatures, have very different properties than when prepared in combustion furnaces. They are more resistant to changes by hydration or carbonation, and are specially adapted to use as furnace-linings.

Dose—One Meal Three Times a Day.—

Dr. F. S. Gordon says that the best way to take alteratives is in the form of vegetables and fruits. Spinach and apples contain the most iron; milk, cabbage, lentils, and cheese the most lime; cod-liver oil and fish the most iodine; and milk, eggs, and fish the most phosphates.

Quinine Tannate.—

Professor Puckner questions the value of quinine tannate because of its variability. Its composition depends largely upon the formula and method by which it is made, and it should contain 30 per cent of quinine, but often contains less. One sample examined contained a quarter of its quinine uncombined, and was not, therefore, tasteless.

A New Cork.—

A plant which grows abundantly in the Philippines (*Fagara integrifoliola*) has a fibrous covering on its roots which is chemically similar to cork, and which when pressed into form makes a good substitute for cork. It is known as "root cotton" and promises some technical uses of value.

No Action When Dry.—

Calcium carbide is recommended as a caustic in the treatment of cancers, ulcers, malignant skin diseases, etc. It is said to act only on the discharging surface provided that the rest of the skin with which it is in contact is kept dry.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Clockmakers' Oils.

P. B. D. writes: "Please give me a formula of an oil for lubricating fine machinery such as clocks and motors for piano players."

Lubricants for clocks and delicately constructed machinery in general are usually prepared from very carefully refined rape oil, or, preferably, fine olive oil. To remove the final traces of acid from the oil it is shaken with one per cent by weight of caustic soda, this being repeated several times daily for two or three days. A large volume of water is then added, and the supernatant oil, which is now quite free from acid, is poured off. It, however, still contains coloring matters and certain other constituents inimical to lubrication, and to remove these the oil is shaken up with strong alcohol, which dissolves them out. For this purpose, 10 parts by volume of the oil are placed in a clear glass bottle holding about one-third as much again, along with 2 parts of 90-per-cent alcohol. The bottle is next well corked, and shaken up so as to thoroughly mix the oil and the spirit. The bottle is set out in the sun, and shaking repeated several times a day. At the end of about three weeks—though in bright summer weather ten to fourteen days often suffice—the oil will be water-white, the supernatant layer of spirit having assumed a strong yellow tinge through the coloring matter absorbed from the oil. The purified oil is siphoned off and filled at once into small, tightly corked glass bottles, which should be kept in a cool, dark place. The spirit can be recovered by careful distillation, in a perfectly colorless condition, and used over again.

The mineral oil for clockmakers' use is a specially refined heavy tar oil. One hundred parts of ordinary heavy tar oil are treated with two parts of bleaching powder, well stirred in, and followed by 3 parts of crude hydrochloric acid. The mixture must then be vigorously stirred, and set aside for six hours. At the end of this time the oil is poured off from the watery liquid, and repeatedly shaken up with 5 parts of caustic soda lye each time. Finally, the refined oil is filtered through gray blotting-paper.

Olive oil is also used by clockmakers as a lubricant. An olive oil must be obtained that has been refined by the sulphuric-acid method, very well known, and afterward shaken up with about 2 per cent of weak lye to insure the complete elimination of the final traces of free acid. The oil and lye are left in contact for several days after a thorough shaking, the oil floating on the surface being then drawn off and bleached with spirits, as described above. Like all other fine lubricating oils, the olive oil so treated must be filled into small bottles, which are then tightly corked and stored with care.

Shoe Polishes.

M. J. S.—Formulas for liquid shoe polishes appeared in this department of the BULLETIN last month. Shoe pastes may be made after the following formulas:

(1)

Marseilles soap	122 parts.
Potassium carbonate	61 parts
Beeswax	500 parts.
Water	2000 parts.

Mix and boil together with occasional stirring until a smooth, homogeneous paste is obtained; then add, a little at a time, and under constant stirring, the following:

Rock candy, powdered	153 parts.
Gum arabic, powdered	61 parts.
Ivory black	1000 parts.

Stir until homogeneous, then pour, while still hot, into boxes.

(2)

Soap	122 parts.
Potassium carbonate	61 parts.
Beeswax	500 parts.
Water	2000 parts.

Mix and boil together until a smooth, homogeneous paste is obtained; then add

Boneblack	1000 parts.
Powdered sugar	153 parts.
Powdered gum arabic	61 parts.

Mix thoroughly, remove from the fire, and pour while still hot into boxes.

(3) Shoe pastes or polishes are mixtures of yellow wax and turpentine, varying in proportion as to the hardness of paste desired and the season of the year involved. Summer weather requires the use of more wax than winter weather.

The pastes are colored with ivory black and alcoholic solutions of aniline—orange, brown, and red. Sometimes palm oil is used. For a starter try wax, 1 part, and turpentine, 3 parts. Melt on a water-bath and stir in the color desired. If palm oil is used, employ about 25 per cent.

Polishes for Silverware.

B. L. K.—F. C. Hottel, of Cleveland, Ohio, makes a polish for cleaning silverware which is very satisfactory:

Shave up one large cake of ivory soap and dissolve it in 20 ounces of water. Add 2 ounces of glycerin, mix thoroughly, and then gradually add 1 pound of English precipitated chalk. Stir the mixture thoroughly, and then add 1 ounce of potassium cyanide which has been previously dissolved in 6 ounces of water. Mix again.

This polish is very cheap to make. The following is also a good formula:

Chalk, levigated	2 parts.
Oil of turpentine	4 parts.
Stronger ammonia water	4 parts.
Water	10 parts.

Mix the ammonia and oil of turpentine by agitation, and rub up the chalk in the mixture. Finally rub in the water gradually or mix by agitation.

A Medical Query.

F. S. writes: "A friend of mine has a sallow complexion, covered with many pimples and blackheads. I have given him different medicines, such as calcium sulphide tablets, blood purifiers, and salves, but without results. What would you suggest?"

Consult a dermatologist. Skin affections try the skill of trained physicians, and we don't feel competent

to prescribe for them. If there is any anemia, that must be corrected. If the liver is sluggish, it must be stimulated. Local treatment may also be necessary. If the case is acne, bacterial vaccines are indicated. If there is any blood disease present, it, too, must be cured. But only a physician can tell the real cause of the trouble.

A White Capping Mixture for Bottles.

J. S. P. writes: "Can you tell me how to prepare a sealing preparation? I want something that is tough and strong, but stays pliable." J. D. C. asks the same question.

In "350 Dollar Ideas for Druggists" will be found a formula suggested by Crawford T. Ruff of Montgomery, Alabama. The mixture is especially fine for capping toilet preparations:

Melt 8 ounces of white wax over a spirit lamp. For this purpose the wax may be put in any cheap tin or porcelain vessel with a handle. When the wax is melted, add 2 drachms of thick mucilage of tragacanth and 1 ounce of bismuth subnitrate. Stir briskly until a uniform mixture results. The preparation is now ready for use. Dip the necks of the stoppered bottles in to the desired depth. The substance will congeal almost immediately. Repeat this operation about three times and you will have a beautiful white cap—firm, yet easily removed. During the capping process the mixture must be stirred and held over the lamp from time to time.

Nickel-plating for Brass Auto Parts.

G. E. D. writes: "Will you kindly publish a formula of a preparation to be applied to brass to give it a silver or nickel coating? I want a preparation for use on auto brass parts."

A similar query was answered on page 218 of the May BULLETIN this year. The querist wanted to know the process for nickel-plating brass trimmings and lamps on automobiles permanently. Suppose you consult the information which we gave at that time. as we hesitate to republish that material so soon afterwards.

"Liver Spots."

W. A. B. writes: "A friend of mine, incidentally a customer of the store, wants a remedy for brown spots on the arms and chest. He has tried a solution of sodium hyposulphite, but as soon as he stopped using this remedy the spots came back. I would like to know if there is any positive cure."

These so-called "liver spots" are a pigmentation of the skin. Some form of iodine given internally is the only remedy that we can suggest. Skin specialists give arsenic. Hydrogen peroxide and sodium hyposulphite are used locally. Suppose you consult a physician. We hardly feel competent to suggest a remedy for this persistent trouble.

A QUINTET OF DETROITERS.—This group of Detroit druggists was photographed in August at the convention in Muskegon, Mich., where the two State organizations were amalgamated into the new Michigan State Pharmaceutical Association. Reading from the left the men are: J. H. Webster, F. W. R. Perry, Charles F. Mann, Grant W. Stevens, and James W. Seeley.

PROFESSOR DIEHL AS A GRANDFATHER.—C. Lewis Diehl, the well-known teacher, pharmacist and N. F. reviser, is seen enjoying the philosophic observations of his little grandchild at the Professor's home in Louisville.

Polish for Brass.

W. M. H.—Here are two preparations for polishing brass:

(1) Oxalic acid .....2 ounces av.
Pumice stone, powder.....4 ounces av.
Water, enough to make.....16 fluidounces.

Disolve the acid in the water previous to adding the pumice. Apply, after shaking, with a rag, and polish with a second dry woolen rag.

2. Dip the article in a mixture of 2 parts of common nitric acid and 1 part of sulphuric acid, contained in a stone jar. The articles, after being dipped in this mixture, are thoroughly washed with water and then rubbed with dry sawdust. A solution of oxalic acid is used in the same way, smooth surfaces being rubbed with prepared chalk, or equal parts of the latter (or whiting) and oxalic acid, made into a paste with water, may be applied. A great many other processes are employed, such as rubbing with rottenstone and sweet oil, and then with whiting; this is particularly effective with copper articles.

Solution of Iron Peptonate and Manganese.

F. J. A. wants a formula for making solution of iron peptonate and manganese. A formula appears on page 88 of the National Formulary:

Ferric peptonate	45 Gm.
Soluble manganese citrate	8 Gm.
Ammonia water (U. S. P.)	13 Cc.
Aromatic elixir (U. S. P.)	50 Cc.
Alcohol	150 Cc.
Distilled water, a sufficient quantity to make	1000 Cc.

Dissolve the ferric peptonate in 250 Cc. of distilled water, add the ammonia water, and then the alcohol. Dissolve the

manganese citrate in 100 Cc. of distilled water, and add it to the first solution. Then add the aromatic elixir, and enough distilled water to make 1000 Cc. of solution. If manganese peptonate is available, 26 Gm. of this may be used in place of the soluble manganese citrate directed in the foregoing formula.

To Clean Nickel-plated Goods.

W. M. H.—A paste for polishing nickel may be made by mixing chalk with tallow.

1. To clean nickel-plated goods, nickel platers use ordinary rouge. The following mixture is said to be excellent: Take equal parts of precipitated iron carbonate and prepared chalk, or take quicksilver with chalk ½ ounce, and prepared chalk 2 ounces; mix them. When used, add a small quantity of alcohol and rub with chamois leather.
2. Rub the article with a little fresh lard or lard oil, on a wash leather or piece of buckskin. Rub the bright parts, using as little of the rouge and oil as possible; wipe off with a clean rag slightly oiled. Repeat the wiping every day, and polish as often as necessary.

Marble Polish.

B. L. K.—Mr. W. C. Durkee (Boston) gives the following formula for a marble dressing or polish:

Pure beeswax	10 parts.
Japan gold size	2 parts.
Spirits of turpentine	88 parts.

The mixture is of creamy consistence, and should be applied in small quantities, with the aid of a piece of white flannel. If it is desired for use upon white marble, white wax may be substituted. The same preparation can be used to advantage on woodwork. The Japan size prevents the stickiness which exists when wax alone is used.

Foul-smelling Substances.

W. R. M. wants the name and properties of "the most foul-smelling" chemical.

Carbon bisulphide and hydrogen sulphide solution are notoriously offensive. The valerianates, too, have a bad odor. The properties of these substances can be found in the literature.

GENERAL ESSAYS

A LITTLE BRIEF AUTHORITY.

By Harry B. Mason.

The gentle and modest William Dean Howells touches humorously in one of his novels—I think it must be "Their Wedding Journey"—on the awe begotten in him by the lordly importance of the ticket-seller in the railroad depot. Other observers, too, have called attention to the kingly air of condescension with which the man in the theatrical box office reluctantly consents, even at a good price, to furnish you tickets of admission to his Palace of Pleasure.

Novelists, essayists, humorists, and students of human nature in general should now be reminded that a third type of individual has risen to take his place, thanks to the automobile age, in the same group. This is the Traffic Policeman—the specimen of complete and unqualified Autocracy who stands at the street intersections of our great cities, and by a mere crooking of the finger establishes the law for Kings and Peasants alike. Of this Overlord it may be said that the world hangs upon his slightest nod, and woe unto the man who ignores or anticipates his decisions!

The Traffic Officer is an interesting study, and a philosopher might develop a readable treatise on the phases of human nature which he typifies. I fancy that to snatch a man out of the ordinary circles of life, and, without warning and preparation, suddenly invest with all the power and dignity of a great office of this kind, is to subject him to a remarkable test of character. Few can stand so dizzy a climb without losing their heads, and it seems to me that some graduated system of ascension should be worked out so that the Heights of Authority might not be reached with such startling suddenness.

All of us are hungering for power of some sort—social, political, financial, or intellectual. It is meat and drink for us. To gain it we are willing to undergo all sorts of privations, meet all manner of rebuffs, and even found a new political party if the goal can be reached in no other way. This being, then, a universal trait of human nature, is it cause for wonder that the Traffic Policeman swells up over his sudden achievement of a little brief authority and begins at once to play the autocrat?

He represents power more completely than almost any other individual in the community. The high-handed husband may be flouted; the dictatorial employer may be dared; the trust may be ignored; the judge may be overruled; but you can do none of these things to the Traffic Officer. He demands unconditional and immediate surrender—and there is no redress or appeal. For the time being he represents the law in his own person—and martial law at that.

If you question his rulings, or fail to understand them, or happen not to see his kingly wave of the hand, what do you get? Abuse—voluble, vigorous, violent abuse, embellished with all the ornamentation of a policeman's vocabulary. "What y' stoppin' there for? Don't you know any better'n that? How much time y' want for crossing this street anyway? Hurry up now—git yourself out o' here quick!" And there is more of the same Chesterfieldian language following you as you go on up the street in your machine.

What redress, we may ask, has one got against Verbal Power of this sort? Verbal Power, indeed, is the most complete sort of power in the world. A gentleman cannot compete with a policeman in a Contest of Vulgarity. He is sure to be worsted. He is unskilled. The meanest things he could say would fall short of the mark, and the Man in Blue Cloth and Brass Buttons would come out an easy winner at every bout.

It's no use—we are mastered. This may be a democratic country, but every little while some dictator arises, lords it over us with authority more or less brief—and we bend the knee. The Traffic Officer has seen his opportunity. If the Dean of American Letters was awed into insignificance by the superior attitude of the railroad ticket seller, what chance, think you, do the rest of us have to hold our own against the far greater importance of the Traffic Policeman? None whatever. Submission is the only thing left to us—and we may as well do it gracefully.

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THE MONTH'S HISTORY

A LITTLE POLITICS.

As we are scanning the field this month to detect developments of interest in current pharmaceutical history, it seems to us that almost everything is overshadowed by the great national interest felt among all classes and in all callings in the forthcoming State and national elections. This year is certainly an exceptional one and it promises to play a large part in the political annals of the country. The BULLETIN OF PHARMACY, however, is not in the slightest degree a political organ, and we do not propose to express any political sympathies. Furthermore, the election will be over with in all probability before at least some of our readers receive this issue of the BULLETIN, and predictions might sound foolish in the face of realized facts.

At this writing it looks as though Governor Wilson would be elected, chiefly because the Republican party is split in twain by the existence of two tickets and two candidates. It is generally believed, however, that the attempt upon the life of Colonel Roosevelt has so altered the possibilities as to make any sort of prediction somewhat hazardous. In any event, whatever the results may be, we have pleasure this month in presenting the portraits of another group of druggists who are up for public office in different parts of the country. Several of them have been nominated for their State legislatures, and two of them are candidates on the Progressive ticket. We are very glad to see druggists interesting themselves in politics. Particularly in the State legislatures, they are in excellent position to render valuable services to their calling.

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DRUGGISTS IN OFFICE.

Theodore Campbell, for instance, whose portrait we present this month, and who is up for reëlection to the Pennsylvania legislature on the Republican ticket, is a member of the Committee on Legislation of the Pennsylvania Pharmaceutical Association, and in his dual capacity he has looked out well for the interests of the trade. Samuel C. Henry of Philadelphia, the new member of the Executive Committee of the N. A. R. D., is also a nominee for the State legislature this year, but we have been unsuccessful in getting his portrait for reproduction. In another legislative district in Pennsylvania we find that two druggists are opposed to one another—Jacob W. Smith on the Democratic ticket and Dr. T. E. Davis on the Progressive ticket. Dr. Davis's portrait we are showing this month, but we have been unable to secure that of Mr. Smith.

One portrait in our group this month is of particular interest—that of Jerry T. Logie. Mr. Logie is only 26 years old, and he is the youngest man ever elected as an alderman in

the city of Grand Rapids, Michigan. In a recent letter to us he expresses his conviction that the druggists of this and other States should make greater effort in the future than they have in the past to have representatives of their own in public office to safeguard their interests. This has been the N. A. R. D. gospel for years, and we are heartily in sympathy with it.

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MR. PLAUT ELECTED PRESIDENT.

The National Wholesale Druggists' Association held its annual meeting in Milwaukee last month, and it was a very successful gathering. The attendance was somewhat less than usual, but a good deal of very effective work was accomplished. The president

Albert Plaut.

elected to conduct the organization during the coming year was Albert Plaut, and the choice was one of great fitness. Mr. Plaut is well known as head of the house of Lehn & Fink in New York City. He has always been one of the leading figures in the N. W. D. A., and among other things has occupied the strategic position of chairman of the Board of Control. Some years ago, too, he was chairman of the Committee on Adulterations, and the report read by him on that occasion was quoted all over the country and even abroad. He is an authority on the drug market, is a man of unusual ability, has wide interests, concerns himself with civic and educational affairs, and will reflect dignity and character upon the office of president.

A GRADUATION LAW IN NORTH DAKOTA!

We discussed the graduation prerequisite question at some length in the BULLETIN last month, and gave a history of recent votes taken in several States to determine what the general sentiment was. We now find, as an interesting supplement to what we then said, that a graduation prerequisite law has been enacted in North Dakota. Our authority for making this statement is the *Northwestern Druggist*, in the October issue of which Prof. F. J. Wulling quotes the provisions of the act and comments upon them. This makes four States having graduate prerequisite laws—New York, Pennsylvania, Rhode Island and North Dakota. In addition to this the Board of Pharmacy of the State of Washington, as we reported last month, has established the graduation prerequisite on its own initiative.

The North Dakota law provides that after January 1, 1913, an applicant for registration before the State Board of Pharmacy must, among other things, have completed at least one year of work in an approved school or college of pharmacy. After January 1, 1915, two years later, he must have been graduated from an approved school, and must have received a diploma therefrom. As to what constitutes an "approved" school or college, the Board of Pharmacy is given the power to separate the sheep from the goats, although it is definitely stated in the law that no school shall be recognized unless it has a competent faculty of instructors, a two years' course of not less than 600 hours given to lectures and recitals and 200 hours given to laboratory work, and unless each school year consists of not less than thirty-two weeks and five days of every week.

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THE CLERKS ON THE PREREQUISITE QUESTION.

The foregoing reference to the new graduation prerequisite law in North Dakota reminds us that there was an exceedingly hot debate over the prerequisite question at the recent convention of the California Drug Clerks' Association. Notwithstanding the fact that a large majority of the clerks in attendance upon the meeting were themselves non-graduates, and that there was a strong sentiment against making the restrictions too severe, a resolution was finally adopted unanimously in favor of a modified graduation pre-

requisite. This resolution was, however, in the nature of a compromise. When the vote was first taken, it was against the prerequisite idea. Subsequently, when the sentiment became so strong as to compel a reopening of the question, the advocates of prerequisite legislation gained additional strength and overturned the previous vote.

In its final action the association recommended that a law be introduced into the next session of the State legislature providing that after July 1, 1914, all candidates applying for examination before the State Board shall have completed one full term in a college of pharmacy whose entrance requirements cover not less than two years of high school work or its equivalent; and that after July 1, 1915, they shall have completed two full terms in such a college.

It will be seen by reading between the lines of these requirements that actual graduation is not provided for or made mandatory. This was in the nature of a compromise; and it was asserted, moreover, that once a law were enacted and enforced, the requirements might be stiffened if the conditions then warranted such a step, and if prerequisite legislation were found to be successful.

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ACHIEVEMENTS OF THE CALIFORNIA CLERKS.

The California Drug Clerks' Association, indeed, is a pretty live organization. Until recently, the membership has apparently been limited to San Francisco and the surrounding cities. Energetic efforts have lately been made to create what would really be a strong State organization, and the first annual convention, held in September, was the result. President J. S. Callaghan, in his address, declared that the California Drug Clerks' Association had among other things achieved the following list of triumphs during its existence:

First: The ten-hour law, which provides a drug clerk shall not work more than an average of ten hours a day, or sixty hours a week of six consecutive calendar days.

Second: The minimum scale of wage. The Association decided that an increase of salary was a necessity, and with the coöperation of the proprietors a schedule was adopted of the minimum wage of $100 for licentiate and $75 for assistant.

Third: The closing of drug stores Sunday afternoon from 1 to 5, initiated by our Association, and extending, with the exception of a few towns, all over the State, and which all drug clerks should use their utmost endeavor to maintain.

Fourth: The employment bureau, which has been the means of securing positions for many clerks out of employment.

Fifth: The sick and death benefit. We are the first organization of drug clerks in the United States to make provision for the sick, and provide funeral expenses.

Sixth: Representation on the State Board of Pharmacy, numbering three of our brothers, all of whom have taken an active part in the life of the Board in the past ten years.

Seventh: The *Drug Clerk's Journal*, the first issue of which appeared in October, 1911, edited and published by the Association in the interest and welfare of the drug clerks.

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THE PROPRIETARY MEDICINE INDUSTRY.

In the October issue of the *Pharmaceutical Era* there is a very interesting article on "The Proprietary Medicine Industry," by Frank J. Cheney of Toledo, president of the Proprietary Association of America. Some facts are therein contained which we believe will prove rather astonishing to our readers, as they did to us. In the first place, the total production of proprietary medicines in 1911 was $160,000,000, whereas in 1909 it was $142,000,000, and in 1904 $117,000,000. Thus, as Mr. Cheney points out, the patent medicine industry has undergone a remarkable development during the very years when it has been hammered so severely by the popular magazines and by attempts to secure unfriendly legislation.

Mr. Cheney remarks, however, that never has there been a time, during his 40 years of connection with the industry, when it has not been made the subject of more or less systematic and continued opposition. That the business can thrive under constant pummeling seems to him strong evidence that it fills a real need, fills it well, and is bound to survive and grow. At the present time 53 per cent of the gross sales of jobbers are of proprietary medicines. But even this does not tell the whole story, for it does not include any of the proprietaries sold direct by the manufacturer to the retailer, or those made by the retailers themselves, or those made and marketed by coöperative concerns. Then, too, the itinerant venders do a business of large volume in ready-made medicines, so that altogether the figures are stupendous.

Mr. Cheney concludes, and he challenges any one to refute his statements successfully,

"that more patent medicines are used to-day than were previously used in the history of the world, that the business is larger this year than it was last, and that it will continue to grow. The per capita consumption is increasing, the population is increasing, and it follows that the proprietary medicine business will likewise continue to increase." He points out in conclusion that the retailer who makes his own domestic remedies is really as much of a manufacturer as are the members of the Proprietary Association themselves, and that any legislation hostile to the interests of the industry affects him no less than it does them.

Mr. Cheney makes no attempt in his article to defend those manufacturers and those proprietaries which are properly subjects of censure. He admits that there are always abuses to be corrected. But he insists that the Proprietary Association of America has never put itself in opposition to needful legislation, that it did not oppose the food and drugs act, that it has not opposed the enforcement of this act, and that it has been in sympathy with the enactment and enforcement of the various State narcotic laws.

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COCA-COLA INJUNCTION AGAINST THE A. D. S.

The Coca-Cola Co. has won first blood in its suit against the American Druggists' Syndicate. Judge Lacombe, of the United States District Court of the Southern District of New York, has issued a temporary injunction confirming the trade-mark rights in the name "Coca-Cola," and restraining the A. D. S. and its members from infringing these rights through the use of the name "Extract of Coca and Kola," or any other name which "is no substantial departure from the term 'Coca-Cola.'" The operation of this injunction, however, has been stayed by the court for sixty days in order to allow sufficient time for the A. D. S. to withdraw its product and its advertisements. In the meantime, of course, the Coca-Cola people will endeavor to have the injunction made permanent.

The contention of the plaintiff was that the American Druggists' Syndicate had attempted to substitute its product for Coca-Cola, and in evidence there was exhibited a mass of advertising literature and several catalogues which had been prepared and circulated by the A. D. S. The further claim was made that the use of the name "Extract of Coca and Kola" constituted an infringement of trade-mark rights. The reply of the Syndicate was that substitution had in fact not been practiced, and that in any event the name Coca-Cola was a descriptive one and was not entitled to trade-mark protection. Judge Lacombe held, however, that the company's trade-mark rights had been established last July in the suit against the Nashville Syrup Co., and he declared that the use of the term "Extract of Coca and Kola," or any similar term, whether or not the word Kola was spelled with a K or a C, was an insufficient departure to avoid the imputation of unfair competition and the interference with trade-mark privileges.

* * *

A REMARKABLE CHARACTER.

There passed away a few weeks ago in Boston a man who was not very well known to the druggists of the country, but who was nevertheless a remarkable character. We refer to Charles P. Jaynes. Mr. Jaynes was entirely a self-made man. Starting life as a boy in a drug store, he subsequently traveled for twenty years as a drug salesman, and finally secured enough capital to start a small drug store for himself in Boston. Following out several entirely original conceptions, his business began to jump forward from the start, and he ultimately developed five large stores located at strategic points in the down-town districts of Boston. They all became remarkably successful, and finally, when Mr. Jaynes had reached the age of 55 or 60 years, and was willing to retire from business, he accepted a most flattering offer for the purchase of his business from the William B. Riker & Sons Co. of New York City.

After that he devoted himself to the pleasures of leisure, to various charitable and philanthropic activities, and to the investment of his wealth. He suddenly died late in September from heart failure at the age of 67. His estate is now found to be valued at $530,000, and among the bequests provided for in his will have been those made to certain hospitals, the Boston Y. M. C. A., the Salvation Army, a home for aged couples, and the like.

During the establishment and the growth of his stores, Mr. Jaynes, it must be confessed, practiced certain cut-rate and other aggressive methods which made him *persona non grata* to the druggists of Boston. Aside from this, too, he had many ideas which were extremely unconventional in character. Appealing primarily, for instance, to an enormous transient trade, he discouraged any custom in prescriptions during the rush hours of the day when commuters were coming from or going to their trains. It is a novelty for a pharmacist to turn his back on the really pharmaceutical portion of his business! And yet he developed excellent prescription departments in all his stores, and for several years employed a professor of pharmacy to analyze his purchased stock and to give assurances of high quality.

He was a pioneer in many respects, and a character of great originality. He rewarded brains liberally on the one hand, and on the other he had nothing but the most rabid impatience for incapacity. He trained up a fine force of assistants, managers, and clerks, and to the very last he kept his fingers on the pulse of his business. He made a brilliant success of all of his endeavors.

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REGARDING CONTRABAND SYNTHETICS.

The prosecution of several hundred druggists by Herman A. Metz & Co., now known as the Farbwerke-Hoechst Company, for the sale of contraband synthetics, has attracted a great deal of interest and some measure of indignation. In New York City, where most of the arrests have been made, the pharmaceutical societies have been inclined to look upon the whole campaign as one of persecution instead of prosecution. We now find in the October issue of the *Practical Druggist,* however, a letter from Mr. Metz himself, which is in effect an answer to some of the allegations of unfairness made against his house.

He says, for instance, that in the case of synthetics on which the patent has expired, there would be no objection if druggists bought a product under the chemical name, and answering to the standard of quality, but instead of this they purchase supplies from peddlers "who have their offices in their hats, who give no bills, who simply send the goods by mail against cash, or hand them over the counter, without any guarantee as to the quality, and the only way to stop all of this is to make examples of those druggists who persist in the illegal practice." These peddled synthetics, Mr. Metz insists, are "adulterated in many ways," and the circulars issued by at least one dealer call attention to the fact that he can deliver "goods of any standard at any price, but will not guarantee the quality!"

With particular reference to pyramidon, for instance, Mr. Metz says that he is on the track of an American dealer who "obtains an article made in Switzerland, brings it over in bulk, has boxes made in imitation of our package and a label in exact imitation, bearing not only the trade-mark name pyramidon, but the name of the manufacturer and the name of my firm, with the pure food and drug guarantee besides!" Some of these packages have been examined and found to be different in appearance and in therapeutic value. Others are under weight. "Every kind of a swindle is being perpetrated," declares Mr. Metz, "and all under the label of the manufacturers of the real article and under the label of my firm as sellers."

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DELAY THE N. F.?

There seems to be a pronounced movement now to delay the publication of the National Formulary until after the new edition of the U. S. P. has made its appearance. The argument is that, on the one hand, some of the proposed N. F. preparations may appear in the U. S. P., and that on the other hand most of the deletions of the U. S. P. are of sufficient value to include in the N. F. In some respects, however, the delay will be unfortunate, for we understand that the N. F. is now practically ready for publication, whereas the U. S. P. will probably not appear for a couple of years or more.

EDITORIAL

THE GROWING DEMAND FOR MORE SIDE-LINES.

There is an exceedingly interesting article in the August 22 issue of *Printers' Ink* entitled "Why Drug Stores Like New Lines." The author, Laurence Griswold, is presumably an advertising man. At any rate, writing from the standpoint of the manufacturer, he points out the incontestable fact that nowadays, when a house wants to market a new specialty of any kind whatsoever, whether having anything to do with the drug business or not, it considers the druggist as a distributor quite as much as it does other classes of merchants. Some manufacturers, indeed, have found that it pays them to distribute their entire output through the drug trade, even though the article is something like insoles, which one would naturally think might more appropriately be handled by shoe dealers.

The author of the paper in question goes on to say that the demand for new side-lines in the drug business is becoming increasingly urgent. Why? Well, several reasons are given. In the first place it is assumed that the actual business in drugs is not as good as it used to be. Says Mr. Griswold on this point: "The war for sanitation, pure drug legislation, patent-medicine crusades, the abandonment of counter prescribing, and a great falling off in the number of liquid prescriptions compounded, are a few of the causes of the losses mentioned. Of course, the causes in each case were public benefits, but they cut deeply into the revenue of the old-fashioned drug store."

Arguing along the same line, the author goes on to remark: "People have learned to use medicine as a preventive. Sanitary laws have stiffened greatly in the last twenty years. More teeth are filled and fewer are pulled. Scores of ailments were traceable to bad teeth. With more attention being given to teeth, prescriptions have decreased and likewise the attendant profits. These are some of the things which have restricted the field from which the store limited to drugs can derive a revenue."

Another reason given by Mr. Griswold for the assumed dwindling in the drug sales of any one pharmacist is the alleged increase in the number of drug stores. He believes that the increase has been greater than the decrease by fully 20 per cent, and he apparently believes that New York City, for instance, has no possible use for 5000 retail drug stores. The inevitable result, according to his reasoning, is that the druggist has to reach out more and more for side-lines of one character and another. First it was cigars, then stationery, then confectionery and soda water.

Now, however, the movement has grown until the modern drug store has become in reality a department store. Mr. Griswold has been doing a little investigating, and he finds that live drug stores are selling a bewildering variety of things which pay them a good profit. During one of the first hot days of this season a New York druggist sold over 200 pairs of cork insoles following the installation of a window display in which this product dominated. A Brooklyn druggist has built up a nice sale on a patented device for watering flowers. Still another druggist, doing business in a suburban town, declared that shoes are a natural offshoot of rubber goods. "First came the adaptation of rubber gloves for dish-washing," he said, "then a rubber cap was stocked for the benefit of those who didn't care to get their hair wet every time they took a shower. Some woman wore one of the rubber hats down at the beach, and before you know it we couldn't supply the demand for rubber hats. A manufacturer of bathing shoes noticed the popularity of rubber hats. He probably figured that women might be induced to buy beach shoes while getting fixed up with a rubber hat. So the druggists were asked to add the line. They sell well, and there is a good profit in them."

By a similar process, "water wings," a bladder-like device for keeping a would-be swimmer's head afloat, were added to this particular store's stock. A manufacturer secured a patent on a "hat protector." This is a rubber-like covering which can be slipped over an expensive hat and will shield the headgear perfectly from rain. "That sells for ten cents," said the suburban druggist. "It may save a woman five or twenty dollars, and it is a good seller."

Other interesting side-lines mentioned by Mr. Griswold are olive oil for the table, bird seed, china cement, bath cabinets, razor strops, coffee, tea, watches, thermometers, artificial

flowers, whisk brooms, and a patented machine for washing dishes!

So much, then, for Mr. Griswold, and his views and observations. Whatever may be thought about this layman's somewhat liberal ideas regarding lines which may be carried by the druggist, it cannot be doubted that he is touching pretty closely on conditions as they actually exist to-day. Realizing the modern tendency long ago, the BULLETIN OF PHARMACY finally began during the present year a series of articles under the general title of "My Best Paying Side-line." This series was begun in the March issue, and so far the different side-lines described have been as follows: Hosiery, kodaks and photographic supplies, razors and shaving supplies, automobile supplies, optical goods, phonographs, souvenir post-cards, and electrical novelties. Several other papers, not yet published in the BULLETIN, will take up seeds, trusses, optical supplies, and even life and fire insurance. The article this month is devoted to jewelry, and Mr. Maffitt has shown most interestingly how he has made a success of the line.

Of course there are those who resent the introduction of such side-lines in the pharmacy, and who argue with Messrs. Hynson, Seltzer, Raubenheimer, and others that drug stores ought to contain nothing but drugs. But the desire to make a living, with a little something more in the way of comfort and a protection from future want, is as deep as human nature itself. It is bound to express itself. Meanwhile, however, by way of showing how the increase of side-lines in the drug store strikes the humorous cartoonists and the comic weeklies, we are reproducing elsewhere in this issue of the BULLETIN a drawing illustrating this subject from a facetious point of view.

REGARDING THE USE OF TRADING COUPONS.

One of the most interesting talks heard at the Milwaukee meeting of the N. A. R. D. in August was delivered by I. P. Lipson of Chicago, counsel for the National Anti-Coupon Association. The purpose of Mr. Lipson's address was to interest the druggists in an organized attempt to tax out of existence the iniquitous and ubiquitous coupon used nowadays as the old trading stamp was formerly employed.

Mr. Lipson explained that the National Anti-Coupon Association was an outgrowth of the National Leaf Tobacco Association, and was composed largely of independent retail dealers who must meet the competition of the United Cigar Stores Company. He urged the coöperation and support of retail druggists in the fight against the coupon on the ground that druggists themselves may some day have to compete with a chain of pharmacies which will be affiliated in some way with the United Cigar Stores Company, and which will employ a coupon interchangeable with those given out by the so-called tobacco trust. While we cannot recall Mr. Lipson's exact language, he said substantially:

> We have been alive to the power of the United Cigar Stores Company. When one of these stores moves into the vicinity of, say, four independent cigar stores, the independent dealers know at once that within a year or so two of them will be put out of business by the powerful competition of the newcomer. It is only a question of what two are going to be the corpses and what two the undertakers. There is a mortality of 50 per cent among retail cigar stores forced to meet the competition of the so-called trust. We have investigated the causes of the success of the United Cigar Stores Company and have found that their prosperity is due, not to superior merit in their goods, nor to the attractive appearance of their stores, but to the use of the redeemable coupon. It is the coupon which gives them their hold on the public. The independent dealer is in closer contact with his trade than is the manager of the United Cigar Stores Company. The independent dealer, too, sells better goods. But the coupon is the one element, the only place where the United Cigar Stores have the advantage.

Mr. Lipson pointed out that it was impossible to offset the influence of the coupon by handing out trading stamps. The coupon used by the United Cigar Stores Company is their own peculiar property and hence destroys competition where trading stamps encourage it. Trading stamps are sold by a third party and anybody can buy them, but not so with the coupons of the United Cigar Stores Company.

At first the independent dealers hoped to legislate the coupon out of existence, but President Taft said that would be unconstitutional. It is legal, however, declared Mr. Lipson, to tax the coupon and thus indirectly prevent its use. If a tax were placed on the coupon for one-half its face value, it would cost the United Cigar Stores Company three times as much as it does now to use coupons, and the clerks would furthermore labor under

the necessity of placing a stamp on every coupon that was handed out.

Mr. Lipson appealed to the N. A. R. D. for its coöperation and financial support in this effort on the part of the Anti-Coupon Association to tax the coupon out of existence. He pointed out that it would be worth a dollar or two to each member of the Association to prevent monopolies from getting the same hold on druggists that they already have on tobacconists. He predicted, as we have already said, that a system of chain stores in the retail drug business might some day use the coupon system with the same hardship to retail pharmacists that is now imposed upon the independent cigar dealer.

The N. A. R. D., however, could not see its way clear to affiliating with the National Anti-Coupon Association, or giving it any financial assistance. It passed a resolution offering moral support, but went no further.

AN OPPORTUNITY WAITING TO BE EMBRACED.

This is the day of the popular magazine. It abounds everywhere. Millions of people read it. It is found in every home, from the poorest to the richest. Foreigners who visit this country tell us that in no other land are there so many magazines and periodicals, gotten up with so many illustrations and with such attractiveness generally, and read so universally by the people. The magazine in America is a force to be reckoned with.

Now one thing the magazines are doing is to create a steady and enormous demand for a large number of popular articles. The advertisements of these articles are being carried weekly and monthly into countless homes throughout the United States. It has been stated on excellent authority that no less than eighty millions of dollars are spent annually in the advertising of specialties of all kinds in the popular weeklies and monthlies! Where does the demand, so created, seek satisfaction —where do consumers go who want to get some of these nationally advertised articles? Why, they go to the nearest store. If the article advertised is a toilet product, for instance, they go to the drug store. If it is a food specialty, they go to the grocer. If it is something to wear, they hasten to the emporium of the modern department store.

The retailers, then, in all of these various lines, are neglecting a beautiful opportunity if they do not take advantage of this situation. Here is a demand steadily being created for a great variety of articles of one kind and another. Does the retailer make the most of the chance? Does the druggist, for instance, endeavor to bring this trade in his direction? Does he carry nationally advertised articles? Does he let the people in his vicinity know that he is in position to supply their wants? Does he let the live advertiser help him increase his volume of sales?

Unless the druggist can say Yes in most vigorous fashion to all of these questions, he is sleeping in the presence of a valuable opportunity. It has been said that "national advertising is the greatest single source of local profits ever devised." Does the retailer realize it, and does he seize upon the profits made ready for his hand? Unfortunately many national advertisers have found that retail distributors have not coöperated with them as they should, and they have been compelled to go out of their way to get the dealers interested. Some of the popular magazines have themselves endeavored to fill the breach by seeking the assistance of retailers. *Good Housekeeping Magazine,* for instance, has for several years been "re-advertising" to retailers generally the products exploited among its pages, has sought to get them to supply the demand created, and has even gone so far as to furnish them free with cuts and advertising "copy" for their circulars and other ads. Another step has now been taken by the *Good Housekeeping* people in the publication of a quarterly to be known as "Good Storekeeping."

"Good Storekeeping" will have for its main purpose the idea of securing the coöperation of retailers generally in supplying the demand created for nationally advertised products—and it will also seek to enlarge this demand. The paper, too, will contain a sort of digest of the most useful sales articles in the various trade papers. In a sense "Good Storekeeping" will therefore be to the trade journals of the country what the *Literary Digest* is to the newspapers. The idea is certainly an excellent one, and it deserves general support on the part of retail distributors in all lines of trade. "Good Storekeeping" is published at 381 Fourth Avenue, New York City, and our

readers would do well to ask to be put on the mailing list.

An article from the first issue of "Good Storekeeping" we are reproducing elsewhere in this number of the BULLETIN. It will be found among our "Selections." There is no doubt at all that the retailer who is prepared to supply the demand created for nationally advertised goods is following lines of least resistance. The work is already cut out for him—all he has to do is to fall in line and reap the profit! Somebody is going to get the business. Will he take it, or will he let it go to the other fellow in his town?

PROFITS AND EARNINGS

SIX MONTHS OF A NEW BUSINESS.

The owner of this business has had the place only six months. He wants to know how he is doing. The business altogether is not ten months old. The present proprietor bought the store from his predecessor.

Stock and fixtures Feb. 28, 1912	$1941.98
Stock and fixtures Aug. 28, 1912	2200.73
Cash sales, including accounts received	4198.40
Credit sales	761.19
Purchases	2632.53
Expenses	543.04
Proprietor's salary	504.70
Paid on purchases	1914.71
Paid on the business and on notes	862.75
Notes owing for business, with interest	1164.55
Accounts owing on purchases	530.92
Cash in bank	472.56
Outstanding accounts	254.00

This statement is rather peculiar. Many of the items in it would be useful in setting forth assets and liabilities, but they play no part in a statement designed for the purpose of discovering what the profits are. Ignoring, then, most of the figures and digging right down into the heart of the matter, let us find out what this man made on his business during the first six months.

His sales were $4198.40 plus $761.19, making a total of $4959.59. The purchases, on the other hand, were $2632.53, but a comparison of the inventory figures shows that goods to the amount of $258.75 went into the permanent stock and were not actually sold again. Subtracting this amount, we find that the cost of the goods sold during the six months was $2373.78. Deducting these figures from the sales of $4959.59, we have gross profits left of $2585.81—or 52 per cent! In the meantime the expenses were $543.04, plus the proprietor's salary of $504.70, making a total of $1047.74. Subtracting this expense charge from the gross profits of $2585.81, we find net profits of $1538.07—or 31 per cent!

Now it goes without saying that a gross profit of 52 per cent, and a net profit of 31 per cent, both calculated on sales, are certainly astounding. The average gross profit is 35 or 40 per cent, and the average net profit ranges from 10 to 14 or 15 per cent. Of course we are talking about profits based on the selling and not on the cost price. Our friend must sell goods at a remarkable advance over the cost, or else he has made a mistake somewhere in the presentation of his figures. There is an opportunity for error, for instance, in the item of "cash sales, including accounts received." Some of these "accounts received" may have been contracted during the previous ownership of the store, and were therefore not properly a part of the six months' business recorded in the statement. The only way to avoid errors of this kind is to compare accounts receivable at the beginning of the year with those at the close, and then to give the year's sales credit only for any surplus, and correspondingly to deduct any deficiency.

Taking our correspondent's statement at his own valuation, however, we find that his net profits were $1538.07. He had in the meantime paid himself a salary of $504.70, which presumably represented all of his living expenses. The $1538.07 of net profits should therefore have actually accumulated in cash, except for the $258.75 which went into the increase in inventory. Checking up the figures in another way, we have totaled all of the cash receipts, and compared them with the cash disbursements. The disbursements are something like $100 in excess of the receipts. This disparity leads us to believe that our correspondent's figures are at least inaccurate in some details.

The business is small. Evidently the proprietor does all the work himself, without the assistance even of a boy, and he is thus enabled to make a low expense item of 21 per

cent. Sales of $5000 for six months mean $10,000 for a year, and a $10,000 business without a boy is going some! We should naturally assume that at least one assistant would be required, and if one were employed it would increase the expense and cut down the showing somewhat. Even with this concession, however, the business is certainly a remarkably profitable one. Entirely apart from what the expenses may be, gross profits of 52 per cent are not to be picked off every bush! Fifty-two per cent, based on sales, means 102 per cent based on cost, so that we are asked to believe that everything was sold at a little more than twice what was paid for it!

Where is this Elysium situated?

H. B. M.

IS THIS STORE A GOOD BUY?

A BULLETIN correspondent submits the statement of a pharmacy which he contemplates buying. He wants to know the net income.

Jan. 1, 1911: Stock (including fixtures, worth $2000)	$12,600
Jan. 1, 1912: Stock (including fixtures)	12,400
Purchases for the year	11,000
Expenses	5,650
Cash sales	18,500
Credit notes	2,200
Discounts	325
Accounts receivable at end of year	600

The expenses include taxes and interest on the money invested.

We wonder at the outset whether the expenses include the manager's or proprietor's salary. It belongs there.

It is inadvisable to charge up to expense the interest on the investment. Perhaps that explains why the expenses are so high. Dividing $5650 by the sales, $18,500, we find the percentage of expense to be 30.54. The expense ought not to be over 25 per cent for a business of this size. Consider taxes an expense, but do not charge up against the profit the interest on the investment. The net returns from the business are themselves the equivalent of interest on the capital tied up in stock. Figuring money at six per cent, the interest on $12,400 is $744, which swells the total expenses appreciably. Subtracting the item of $744 from the expenses to rectify the error of putting it there in the first place, we find the expense is reduced properly to $4906. Dividing $4906 by the sales $18,500, we now find the percentage of expense is 26.5, which looks more reasonable.

Proceeding next to estimate the net profit for the year, we notice first that the stock showed a shrinkage of $200. The owner disbursed $11,000 for goods and $4906 for expenses, a total of $15,906. He took in $18,500. Subtracting the disbursements from the receipts, $18,500 minus $15,906 equals $2594, the net profit. Subtracting now $200, the shrinkage of stock, from $2594, and we find the net profit to be $2394. Dividing $2394 by the sales, we find the percentage of net profit to be 12.9. If you insist on including the interest on the money invested in the expenses, it will decrease the net profit to $1650, or 8.9 per cent. But as we have already pointed out, that would be inaccurate and contrary to the best practice.

We should say that the net earnings of this store are very satisfactory provided that the expenses include the manager's or proprietor's salary. Of course, if his salary still remains to be paid out of the earnings thus calculated as net, why, then the story changes! If you have to subtract a salary of $1200 from $2394, which is supposedly the net earning, the showing of the place would suffer severely.

JNO. H.

THE HALL OF FAME

PREPARING FOR THE NASHVILLE MEETING.

When the A. Ph. A. decided to go to Nashville in 1913, it brought great joy to the heart of J. O. Burge. Mr. Burge has been endeavoring at various times for fifteen years to bring the association to his town. He began at the Montreal meeting in 1896. Last year he was again active at the Boston convention, and this year he went to Denver with blood in his eye. The members finally capitulated.

It was only right and proper under the circumstances, after Nashville had been selected for 1913, that Mr. Burge should be elected local secretary. In this capacity he will have supervision over all convention arrangements. Already Mr. Burge has called a special meeting of the local branch of the A. Ph. A. to take pre-

liminary steps. He is president of the branch, while the vice-president of it is E. A. Ruddiman, and the secretary W. R. White. All three men are more or less regular attendants at the annual conventions. Nashville is centrally located, easily accessible from all points, and the prospects for a large meeting are excellent. The Nashville people, too, are determined to roll up a lot of new members for the Association.

J. O. Burge.

DEATH OF FRANK A. FAXON.

The sudden death of Frank A. Faxon, of the Faxon & Gallagher Drug Co., Kansas City, Mo., removes one of the ablest leaders in the jobbing trade of the country. For a long period Mr. Faxon had been one of the coterie of six or eight men who were really the life and spirit of the National Wholesale Druggists' Association, and he served as its president back in 1894. Conspicuous for his talent as an orator, he was often called upon to make speeches of one kind and another, and he was never in happier vein than when acting as toastmaster at a large banquet. In the commercial life of Kansas City Mr. Faxon was always prominent. At one time he was a member of the Board of Aldermen, and at his death was president of the Board of Education and at the head of the public library system. On several occasions he served as president of the Commercial Club of Kansas City, and it was indeed while walking from his office to this Club, in order to take part in the annual election of directors, that he was fatally stricken with apoplexy.

Frank A. Faxon.

PROFESSOR LLOYD A PANAMA COMMISSIONER.

Governor Harmon of Ohio has recently appointed Professor John Uri Lloyd of Cincinnati a member of the Panama Exposition Commission of the State. The other two members of the Commission are Robert E. McCarty of Columbus and F. E. Meyers of Ashland. This signal tribute to the disinterested ability of Professor Lloyd will prove gratifying to all of his friends.

John Uri Lloyd.

E. F. Leonard, Springfield, Mass., Progressive nominee for the State senate.

Dr. F. F. Jackson, Oakland, Cal., candidate for Commissioner of Public Safety.

Jerry T. Logie, Grand Rapids, Mich., elected member of the City Council, 9th ward.

Dr. J. D. Humphrey, Huntsville, Ala., recently elected City Commissioner after a hot contest.

Theodore Campbell, Philadelphia, Pa., Republican, renominated to succeed himself in the State legislature.

Edward H. Fahey, Philadelphia, Pa., Republican, renominated to succeed himself in the State legislature.

Francis D. Warner, New Carlisle, Ind., Republican nominee for State representative.

W. P. Porterfield, Fargo, North Dakota, Democratic nominee for State senate.

Dr. T. E. Davis, Summit Hill, Pa., Progressive nominee for the State legislature.

Nine More Druggists in Politics this Year.

The Bliss Drug Co. of Bliss, Idaho, has recently made some improvements in its store. The proprietor is J. H. Collins, who is presumably the gentleman at the left.

It is evident from this picture that G. E. Thrash, of Chunkey, Miss., the man at the left, does a thriving business. Look at the number of customers lined up!

"Scruggs for Drugs," is an advertising phrase used by R. H. Scruggs, Laurel, Miss. The store was apparently fitted up by Bangs, and is very neat.

Louis Zrubek, a Bohemian druggist of Cistern, Texas, writes us that in this view he is pouring from a bottle containing one of Parke, Davis & Co.'s fluidextracts.

W. J. Deems, Laud, Indiana, will soon complete 25 years of a varied experience in pharmacy. Mr. Deems himself is shown in our picture, and is the oldest druggist in point of service in Whitley county.

Walter Holberread, Litchfield, Illinois, has one of the most attractive and best-equipped stores in the State. It was recently fitted up by the St. Louis Carbonating and Manufacturing Co.

Drug Stores Here and There.

CATCHING THE CHRISTMAS TRADE.

The Arrangement of Holiday Goods—Decorations that Beautify the Store Interior—Three Trims which Made the Window a Center of Attraction—Several Advertising Ideas Appropriate to the Season.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Christmas comes but once a year. For the help this is often enough, as the holidays mean a lot of work. Every one in the store must turn his attention to ways and means of securing the season's business. The clerk must give careful thought to the subject of gift goods and must make holiday suggestions in a way that will gladden the heart of his employer, and, incidentally, gain for himself a raise in salary.

Sometimes it is easy to formulate such plans, but again it becomes a burden, especially if the year has been a heavy one and the clerk's time has been occupied with other duties. The fact that the hours of the ordinary clerk are pretty well filled has led me to try and lay before him some plans that I have used with telling effect in my own store.

DECORATING THE TABLES FOR THE DISPLAY OF GOODS.

First, one must proceed to advertise. Let us assume that plans have been laid out for a suitable advertising campaign and we are ready to go ahead with it. One must give attention now to windows and interior decorations, arranging the tables on which holiday goods are to be displayed in the center of the store. This arrangement of goods on the tables expedites the work of waiting on the trade during the Christmas rush. Avoid everything that tends to impede the clerk, for time is a valuable asset at this season of the year.

Having set the tables in place, we next turn our attention to ways of decorating them at a minimum cost to the employer. A clean, tasteful decoration, and one that is not expensive, can be made of regular ornamented crêpe paper. This can be purchased at 5 cents a roll of ten feet and gives a good effect. Cover the sides of the table with crêpe paper. Over the base of the table spread plain white wrapping paper, and over this a few napkins with Christmas designs on them. Some use cotton and Santa Claus snow, but I prefer to avoid this substance for the simple reason that it is inflammable. If a customer should come in smoking a pipe, he may set it on fire—a fact which I know from experi-

Window Display Number 1.

ence. So I say, try to avoid using anything which may result in a conflagration.

On the top of the table arrange a series of steps, large at the base and smaller toward the top, or take plate glass and cut out shelves and mount them on iron T's. If you use the T's, as I did last season, it will not be necessary to cover the shelves; plain, clean glass looks very well as it is. At each end of the table secure an upright post, extending up above the table about four feet. Stretch a wire across the entire length of the table and secure it on top of the uprights. Decorations in crêpe bindings or autumn leaves are pretty. Arrange them in a canopy over the table. The wire may also be used to hang light articles on; also to hold price-cards and announcements.

The table may now be filled with such articles as one cares to select. It is preferable to set heavy, bulky goods on the main base and lighter articles on the shelves. Attach the right kind of price-cards and display them properly. With these precautions the table should draw attention and necessarily sell the goods.

INTERIOR DECORATIONS.

For interior decoration I stretched a wire on each side of the room full length. At intervals of about ten feet I stretched wire from side to side across the main wire. On these wires were hung autumn leaves and cardboard painted to represent snow and icicles.

To make icicles, cut cardboard into the proper shape, paint the pieces white, and before they dry dust them over with Santa Claus snow or cover them with diamond dust. The best paint to use in this work is white alabastine.

On the ceiling suspend crêpe paper about three inches wide and give the strips a twist before securing the lower ends. Secure the top end to the center of the ceiling and attach the other ends to the shelving. This scheme gives a pyramidal effect which is very pretty. Suspend Christmas bells and decorations at different points.

Window Display Number 2.

WINDOW DECORATIONS.

In considering the various articles which may be placed in the window, it may be remembered that magazines make a very appropriate present at Yule-tide. They are especially appropriate as gifts to friends outside of the family and should receive careful consideration. We arranged the magazine trim shown in the first illustration. That was our opening shot. At the same time we ran a newspaper ad. calling attention to the fitness of magazines as Christmas gifts. We also mentioned the fact that our window was devoted to a magazine display.

The trim itself was so plain that it calls for little description. In the center was a fireplace over which we arranged the covers of the *Ladies' Home Journal.* Flags were draped as shown in the illustration. On the floor appeared, conspicuously, a sign reading: "Subscriptions received here for any periodical at publishers' prices." Other things in our

window that impressed the passers-by with the fact that it was time to consider Christmas shopping were two display cards. The one in the center read: "In every American home clean, pure, wholesome literature is found. It generally includes the *Ladies' Home Journal.* $1.50 a year—twenty-four issues." The sign on the right read: "A subscription to the *Ladies' Home Journal* makes an excellent Christmas gift. Twenty-four copies for $1.50." Santa Claus, himself, was run by clockwork, thus lending motion to the trim. My advice is always to have something moving in the window whenever it is possible.

As a result of this trim we placed a number of subscriptions, not only for the *Ladies' Home Journal,* but also for several other magazines.

Window Display Number 8.

THE OTHER TRIMS.

The main trims used at Christmas-time in our store were those shown in the accompanying illustrations, Nos. 2 and 3. The backgrounds that appear in these displays were used for several trims, the goods being changed as sales were made.

Trim No. 2 was made by placing a fireplace diagonally across one end of the window and covering the top with pure white paper. A border of Christmas crêpe paper about three inches wide extended around the top. The center of this background was ornamented with Christmas tags, seals, and similar articles, as shown in the illustration. Behind this was pure white puffing with holly wreaths hung suspended at given intervals. At the background appeared latticework in white with holly wreaths and autumn leaves draped over it. Christmas seals, fancy box paper, cards, booklets, and calendar pads were the articles featured in this trim. At the extreme right, near the latticework, hung a large red Christmas bell. From time to time we set different articles in the window. It is hardly necessary to add that this trim was a winner.

The third trim was the main one. It carried out a plan that I had intended should be a winner, and it was. It featured our contest. I might say in explanation that last year, while in Chicago, I purchased an elegant jointed doll with a view to conducting a doll contest during the holidays. The trim itself may be arranged as follows:

Over the entire background secure a green ingrain paper. Next, take large sheets of white wrapping paper, and lay them on the floor on newspapers or anything else to keep them from getting soiled. Paste the papers together to make a length sufficient to cross the background. Then take black crayons and lay out designs of trees. Finally cut these out with a scissors. Proceed then to paste these tree images in position on the background. The effect may be seen in the illustration. The green background appearing through the cut-outs gives a somewhat realistic tree effect. Over the entire border-line run the three-inch decorated crêpe. Over the

side end decorate green below and white above, using the same border as that on the background. On the side space hang the holly wreaths. From the top of the trim suspend gold and silver tinsel, together with all kinds of bead work, Christmas garlands, and similar ornaments, as shown in the illustration.

You can readily surmise the effect of this window when four 60-watt tungsten lights are turned on to illuminate it. Both the near and far observers were attracted. It attracted

SANTA CLAUS

—AT—

TAYLOR'S DRUG STORE

Brand New Stock

WATCH OUR WINDOWS!

Save 25 to 33 1-3 per cent.

SOME OF THE

NEW UP-TO-DATE GIFTS

WE OFFER ARE

Jewel Cases	Mirrors
Hand Bags [adult and infant]	Baby Records
Comb and Brush Sets	Xmas Garlands
Collar Boxes	Card Holders
Cuff Boxes	Post-card Albums
Sewing Boxes	Stationery
Infant Sets	Perfumes
Post-card Boxes	Cigars
Necktie Boxes	Hat Brushes
Work Boxes	Portfolios
Music Rolls	Scrap Books
Music Bags	Paper Knives
Cigar Trays	Holly Wreaths
Ash Trays	Cigar Cases
Toilet Sets [ebony, stag, etc.]	Novelty Gift Boxes
Tourist Sets	Holly Sprays
Cloth Brush Sets	Post-cards [up to $1.00]
Manicure Sets	Gift Books
	Magazines

We have bought these right in the Chicago market and will give our patrons the benefit of our low prices. Wait for our display! It will be worth your time and save you money.

One of Mr. Taylor's newspaper ads.

people on either side of the street, and I may say here that a trim that does not take care of passers-by, far as well as near, loses a great deal of effect.

In the corner at the back I placed our Santa Claus run by clockwork. In the center, suspended on a cord swing, appeared the large doll which was to be presented to the successful contestant.

Various articles were displayed in this trim, including baby sets, toilet cases, shaving cases, combs and brushes, traveling cases, manicuring sets, jewel cases, and other things. Every two or three days the articles were changed, thus lending variety to the trim and showing our complete line of holiday goods. Cigars, perfumes, books, and stationery were not omitted. The large placard in the center of the background told the nature of the contest: "This $6.00 doll given away on Saturday evening, December 24th. With every 50-cent purchase you may place your name on a card and drop it in the box. At nine o'clock Saturday evening, December 24th, the tenth card drawn from the box wins the doll, providing the owner is present."

THE RESULTS.

Aside from constantly talking over the contest with customers, we called attention to it in our newspaper space. It is needless to add that the contest was a success. The results were as follows: Our sales were almost doubled, while the cost of advertising and conducting the contest did not exceed $15.00. I kept an exact record of our disbursements and receipts, but have misplaced it. The combination of window displays and printer's ink gave us the most successful holiday season we ever experienced. The advertisement shown in the accompanying etching was used, but, unfortunately, I am unable to find the ad. announcing the winner of the contest. Of course, we ran many locals in the paper.

The ad. shown in the etching was a beneficial one. The little paragraph at the end was true. When our goods were displayed and the prices shown, people realized that they were getting real bargains. I had made a deal in Chicago that saved us 25 to 33 1/3 per cent on every purchase, and I, in turn, gave the trade the benefit of this discount. Do you wonder we did a good business?

If one will put forth an earnest effort along the lines I have mentioned, he will find it will aid materially in making the season a success.

Some of the locals we used were: "Watch for Santa Claus at Taylor's Drug Store." "Save 25 to 33 1/3 per cent on Christmas purchases at Taylor's Drug Store." "Watch our Christmas windows for bargains. Taylor's Drug Store." "Complete new line of Christmas gifts at Taylor's Drug Store."

This year I made special plans for the holiday business. One thing which I should like to mention is my purchase of a set of Onken

Wood Fixture Younits obtained from the Oscar Onken Company of Cincinnati, Ohio. They save a lot of labor and more than pay for themselves. They include so many different display stands, which reduce the work of arranging a trim to a minimum. This season I may run another contest, but along other lines.

In conclusion, let me wish you one and all a prosperous season.

BIOLOGICAL PRODUCTS IN PHARMACY.

Their Number Increasing—Some are Made from Germs Themselves, Others from the Blood and Tissues of Animals—Serums, Vaccines, Phylacogens, Tuberculins—An Unusually Good Story of Their Preparation.

By FRED I. LACKENBACH.*

This paper deals with the subject of Biologics. It is not intended as a technical treatise. It is designed rather for the commercial pharmacist, the man who handles these products for revenue, to whose interest it is to become conversant with the various products, the mode of preparation, their uses, and their proper preservation.

In the United States biological products are generally produced by the large pharmaceutical houses operating special laboratories under government license. They are marketed through the medium of the drug trade, which is the legitimate channel for their distribution. The average pharmacist however fails to appreciate the intimate relationship between these advanced therapeutic agents and those which have heretofore occupied his active attention, and as a consequence is neglectful of an opportunity to materially advance his professional status. Indeed, the intelligent handling of these products offers an exceptional opportunity to the pharmacist to elevate his calling to a higher plane.

In this field he need not fear the department store, nor the mail-order house, nor the professional price-cutter, for these products cannot appeal to the laity to be employed in self-medication.

Nor do these products appeal to the unprogressive and slothful physician. Their effective application is founded upon accurate clinical and bacteriological diagnosis. How many of your medical friends possess microscopes and are able to differentiate the various pathogenic (disease-breeding) organisms?

The alert physician is quick to perceive the advantages of a scientific and specific therapy that draws the populace away from the evils of self-drugging. He is also able to estimate the value of keeping his patients under close observation and the psychical effect of a cleansed skin and a needle puncture.

Then each individual is "a law unto himself." *A teaspoonful three times a day after meals* is a useless slogan when it comes to the administration of biologics. The indications, dosage and mode of administration are largely matters of individual observation and personal idiosyncrasy. There is no known means by which an individual's resistance or recuperative power may be gauged beforehand. And when a substance is introduced directly into the circulation, there is not an ever-watchful and long-suffering stomach to stand guard over the vital organs. So one must needs be careful. There is no such thing as drawing hard and fast rules in the administration of these products. A physician before administering the second dose must know as accurately as possible the beneficial or untoward effects of the first. This necessitates his having clinical experience and some knowledge of laboratory diagnostic measures.

Therefore, since so much is dependent upon the administration of these products, it is readily apparent how important are the products themselves. It is the pharmacist's business to handle these products with a care bordering upon reverence; and when he has grasped some of the fundamentals governing

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their production, he will handle them in that way.

PHARMACEUTICAL PROCESSES USED.

The science of bacteriology is the basis upon which rests the manufacture of biological products. Their actual production, however, is dependent upon the application of processes that are distinctly pharmaceutical. There is scarcely a pharmaceutical process one could mention that has not its application in the biological laboratory.

Maceration, filtration, digestion, distillation, evaporation, sterilization, desiccation, levigation, dialysis, precipitation, and physiological assay are some of the processes that occur to the writer offhand. These are common pharmaceutical procedures in the biological laboratory. The fact that more refined methods are employed, such as vacuum evaporation and filtration, filtration through porcelain, steam and dry-air sterilization, centrifugalization, and other methods requiring special apparatus, does not alter the fact that the processes are essentially pharmaceutical.

Another striking parallel is found in the finished product. There are: *Pills,* veterinary blackleg vaccine in pill form; *Triturations,* blackleg vaccine in the form of accurately divided powders; *Tablets,* Calmette's tuberculin ophthalmic test tablets and the bacterial vaccines and tuberculins in tablet form; *Capsules,* Moro's tuberculin ointment, which appears also in collapsible tubes. This also is a true *ointment* composed of 50 per cent Koch's old tuberculin incorporated with lanolin. Then there are: *Mixtures,* the bacterial vaccines; *Emulsions,* tuberculin bacillen emulsion, which is more properly a suspension; and *Extracts,* which instead of containing the soluble elements extracted from vegetable drugs, contain substances evolved by bacteria in their growth in artificial culture media. And it might here be added that from their physiological effects there would seem to be an intimate chemical relationship between certain bacterial toxins and some very poisonous alkaloids such as *ricin* and *abrin.*

Bacteriology is a science which should have a place in the curriculum of every college of pharmacy. Problems of sterilization, fermentation, and the rôle of bacteria in disease, might well demand the pharmacist's careful consideration.

It was not until the 8th Revision of the United States Pharmacopœia that this class of products received official recognition.

Antidiphtheric serum is the pioneer in this respect. Tetanus antitoxin and vaccine virus have been accepted for inclusion in the next, the ninth, revision of the U. S. P. In the past decade these products have multiplied to an astonishing extent. Millions of dollars are now invested in their production and dispensing pharmacists have even taken to specializing in this field.

In describing the various products found upon the market, this paper will deal first with those products official, or about to become official, in the U. S. P.; secondly, with those products which have been passed upon by the Council on Pharmacy and Chemistry of the American Medical Association and included in New and Non-Official Remedies, 1912; and lastly with those products which are of more recent origin and which for some reason are not officially recognized. Following a description of these products I shall compare the different classes of bacterial derivatives.

SERUM MANUFACTURE.

Serum Antidiphthericum.—Diphtheria antitoxin is official in the 8th Revision of the U. S. P. It is described as "a fluid separated from the coagulated blood of a horse immunized through the inoculation of diphtheric toxin." It is recognized also in the French, German, and Spanish Pharmacopœias. It is marketed in the forms of *serum, globulin* or *concentrated,* and *globulins, dry.* The serum only is official.

The process of preparing diphtheria antitoxin is characteristic of the preparation of serums in general; so it will be dealt with in detail.

The initial process is the securing of a pure culture of diphtheria bacilli from a throat infected with the disease. A pledget of sterilized cotton mounted on a swab is applied to the diseased tissue and then smeared on a slant of Loeffler's blood-serum media contained in a test tube. This is placed in an incubator kept at the body temperature for twelve or more hours, when numerous, roundish, pin-point colonies will have formed upon the surface. Among these will be found pure cultures of the Klebs-Loeffler diphtheria bacillus.

From these pure cultures other tubes are planted which serve to inoculate large flasks

of specially prepared bouillon. The flasks are then placed in an incubator, where in the course of five or seven days countless millions of diphtheria germs are grown, giving rise to large quantities of virulent diphtheric *toxin*. This toxin is an exceedingly toxic substance and is principally responsible for the destructive effects of the diphtheria disease. Trikresol is then added to the contents of the flasks to kill the germs and the product is then filtered through a Berkefeld—an unglazed porcelain—filter, filtration being facilitated by the employment of vacuum pressure.

The filtrate freed from germs contains the soluble products elaborated by the growing and multiplying germs and is known as *diphtheria toxin*. This toxin is standardized by inoculating guinea-pigs of 250 grammes weight with graduated quantities of toxin. The smallest quantity proving fatal to the guinea-pig within a period of four days is called the minimum lethal dose and this is employed as a basis for inoculating the larger animals.

IMMUNIZING THE HORSES.

Now comes the production of the antitoxic serum. Perfectly sound horses are injected subcutaneously with gradually increasing quantities of the toxin, beginning with one or more lethal guinea-pig doses and increasing, as the animal acquires immunity to the toxin, to perhaps a hundred thousand times that quantity—in volume approximating 0.1 Cc. to 250.0 or 500.0 Cc. of the toxin. The injections are given at intervals of a few days and continue over several months—until the animal's maximum immunity is reached. As the animal develops immunity to the toxin, *antitoxin* is formed. This antitoxin is a reaction product of the living organism. The body cells are attacked by the poison, and if not destroyed are stimulated into the overproduction of *antibodies* capable of combining with and neutralizing the poison (Ehrlich).

The horse is allowed to rest for a week or two, during which a preliminary test is made of the antitoxic strength of his blood serum. If this comes up to requirements the animal is bled by passing a cannula attached to a sterilized rubber tube into the external jugular vein. From five to ten liters of blood is drawn off into sterile parchment-covered jars or blood tubes which are set aside to allow the separation of the serum from the clot. The supernatant fluid is then siphoned off and to it is added 0.4-per-cent trikresol as a preservative. The product, then filtered, constitutes the *diphtheria antitoxin* of the market.

The physiological activity of antitoxin is determined by the number of immunity units contained in each Cc. This may vary from 200 units in poor serum to upwards of 1500 units in high-grade serum. The *unit* is the measure of *antitoxic power*—not of weight or volume. It is an arbitrary quantity based upon physiological test—the neutralization of toxin by antitoxin in the body of the guinea-pig—which animal is highly susceptible to the diphtheria bacillus and its poisons.

STANDARDIZING THE SERUM.

Under the Act of Congress approved July 1, 1902, all diphtheria antitoxin sold in the United States is required to conform to the standard established by the U. S. Public Health and Marine Hospital Service. This standard is based on the Ehrlich immunity unit preserved at the Royal Institute for Experimental Therapy at Frankfort-on-the-Main. Antitoxins of foreign production are standardized and sealed in government laboratories before they are marketed, but in the United States antitoxins are tested in comparison with the government standard unit in the laboratory of each individual producer. This standard unit is prepared and preserved with the most exacting care at the Hygienic Laboratory, Washington, D. C.

At intervals of two months about 10 Cc. of the standard unit serum is distributed to each of the licensed manufacturers. This is a glycerin solution of dried antitoxin and properly diluted contains one antitoxic unit in each Cc. This standard antitoxic unit is used to standardize a laboratory test toxin which determines that amount (approximately 100 fatal guinea-pig doses) which just equals or neutralizes the unit when the two are mixed together and injected into a 250-gramme (standard weight) guinea-pig, the life or death of the guinea-pig within a period of four days serving as indicator. The strength of all unknown antitoxins is tested against this standardized test toxin.

Thus it is seen that the process of testing antitoxin may be compared with an estimation in volumetric analysis, but instead of a chemical this is a physiological test. The body of the guinea-pig is the container in which the titration is made, its life functions are the

indicator, and its life or death the end reaction.

CONCENTRATED ANTITOXIN.

Globulin Antitoxin—Antidiphtheric globulins or concentrated antitoxin—represents in a concentrated form the antitoxic elements of the natural serum. The Gibson method for extracting the globulins from the serum is most commonly employed. It is briefly as follows. It will be observed that starting with the serum above described, the preparation of globulin antitoxin is entirely a chemical and pharmaceutical process.

A quantity of antitoxic serum is added to an equal volume of a saturated solution of ammonium sulphate. A heavy, flocculent, waxy precipitate of the serum globulins results which is separated from the serum-albumin, nucleoproteids, and other inert substances by filtration. The precipitate, containing most of the antitoxin of the serum, is added to a saturated solution of sodium chloride in which the antitoxic- or pseudo-globulin goes into solution, leaving behind the insoluble euglobulins. These are separated by filtration, the filtrate containing the antitoxin of the serum taken. The antitoxic globulin is then precipitated from the salt solution by the addition of acetic acid. The resulting heavy, flocculent precipitate is separated by filtration and dried between layers of absorbent filter paper. The white, waxy mass is then placed in a bag of dialyzing parchment and dialyzed in running water for several days, during which the mass gradually liquefies to a fluid resembling the original serum. This is neutralized with sodium hydroxide and the dialysis continued until it is freed from all adhering salts, etc.

This fluid is from one-half to one-third of the original volume of the serum, and bears most of the antitoxin originally contained. Sodium chloride then restores the normal salt content and a preservative is added. Finally, the globulin antitoxin is filtered through paper, then through a Berkefeld filter, and tested in the same manner as is the U. S. P. antitoxin.

This product, still further concentrated and dried *in vacuo,* is the *dried globulin antitoxin* which is intended for the extemporaneous preparation of the fluid antitoxin by dissolving the substance in sterile, distilled water.

OTHER SERUMS.

Tetanus Antitoxin is proposed for inclusion in the 9th Revision of the U. S. P. It is official as *Serum Antitetanicum* in the Belgian, French, and Swiss Pharmacopœias. Both liquid and desiccated preparations are recognized by the French Pharmacopœia. Like diphtheria antitoxin, it occurs on the market in the serum, globulin, and dried forms.

Tetanus antitoxin is described as the blood serum of horses immunized to the toxin of the tetanus bacillus.

The antitetanic serum sold in interstate commerce in the United States should conform to the standard established by the U. S. Public Health and Marine Hospital Service. This standard is defined as follows: "The immunity unit for measuring the strength of tetanus antitoxin shall be ten times the least quantity of antitetanic serum necessary to save the life of a 350-gramme guinea-pig for ninety-six hours against the official test dose of a standard toxin furnished by the Hygienic Laboratory of the Public Health and Marine Hospital Service."

Antitetanic serum dried is employed as a dusting powder in the treatment of infected wounds.

The two serums described above are classified as *antitoxic sera.* Another group embracing a considerable number of products are the *anti-bacterial sera.* In the preparation of these, instead of employing the bacterial *toxins* in inoculating the animals, the respective bacteria themselves are employed in the forms of virulent, attenuated or killed cultures. These serums are directed against the bacteria present in the disease, rather than against the neutralization of their toxins. A brief summary follows. (See New and Non-official Remedies, 1912.)

Antistreptococcus serum is official in the French Pharmacopœia. It is prepared by immunizing horses with virulent cultures of streptococci.

Antidysenteric serum is the blood serum of horses immunized against the Shiga bacillus.

Antigonococcic serum is prepared from the blood of rams immunized against both dead and living cultures of virulent gonococci.

Antimeningococcic serum is the blood serum of horses immunized against the meningococcus of Weichselbaum (diplococcus intracellularis).

Antipneumococcus serum is the blood serum of horses immunized against pneumococci.

Antistaphylococcus serum is prepared from

the blood of horses immunized against staphylococci.

Antituberele serum is prepared by treating horses for several months with the toxic products of the tubercle germs.

Antityphoid serum is a serum obtained from horses which have been injected with killed cultures of bacillus typhosus.

Normal horse serum is obtained from normal animals as distinguished from that obtained from horses undergoing the process of immunization for the production of curative sera. It is employed to check hemorrhage and acts by increasing the coagulative power of the blood. Normal serum from other animals has also been employed for this purpose.

Two very interesting examples of serums obtained by inoculating animals with substances not of bacterial origin are seen in hay-fever serum and snake-bite serum.

Hay-fever serum (Pollantin), Dunbar's serum, is obtained from the blood serum of horses which have been immunized with pollen toxin. It is therefore an antitoxic serum corresponding to the toxins or poisonous proteids obtained from ragweed and other plants of the *Graminæ*. It is employed as a local application to counteract the effects of pollen toxin in hay-fever.

Serum Antivenimeux.—Antivenomous serum is obtained from horses immunized against the venom of snakes. It is employed against the poison of venomous reptiles, as the viper, rattlesnake, etc.

Of the viruses there are two of immediate interest to the pharmacist—*vaccine virus* and *antirabic vaccine*. The former is proposed for inclusion in the U. S. P. 9th Revision.

VACCINE VIRUS.

Smallpox vaccine is perhaps the oldest and most extensively employed of this class of products. It is the material obtained from the skin eruptions of calves affected with vaccinia —cowpox—and is employed for the vaccination of human beings against smallpox. The organism which presumably gives rise to this disease has not been isolated, which fact necessitates the employment of the material (or virus) as an immunizing agent.

In the preparation of vaccine virus, the process of vaccinating or inoculating the calf and the subsequent curettage of the vesicles in the gathering of the lymph is essentially a surgical procedure. The grinding of the "pulp," its incorporation with glycerin, and the manipulations leading up to the finished product, are pharmaceutical processes, though exception may perhaps be taken to the bacteriological methods employed to determine the presence of contaminating organisms or chemical poisons.

Antirabic vaccine is an emulsion of the cords of rabbits that have died as a result of the subdural injection of fixed rabies virus. The fixed virus is obtained by the passage of rabies virus through a long series of rabbits until the animals die after a uniform period of incubation. The cords are removed from the rabbits and dried over potassium hydroxide for a period of from two to fifteen days. The fixed virus in general use is of the strain employed by the U. S. Hygienic Laboratory, Washington, D. C.

As prepared for administration, each section of cord of the requisite attenuation is ground up with glycerin and salt solution into an "emulsion," the cords of gradually increasing virulence injected subcutaneously into the infected subject as a prophylactic against rabies. The object is to gradually produce an immunity to the rabies virus before the "street virus" takes effect.

BACTERIAL VACCINES.

Another important class of biological products are the *bacterial vaccines* or *bacterins*. These are suspensions of killed pathogenic bacteria in physiologic salt solution to which phenol or trikresol has been added as a preservative. They are standardized to represent an approximate number of bacteria to the cubic centimeter.

The bacterial vaccines may be "stock" vaccines, or "autogenous" vaccines. Stock vaccines may be "specific"—composed of one organism only—or "mixed" or "polyvalent," which are vaccines representing different strains of one organism, or strains of a number of different organisms.

Autogenous vaccines are prepared from the organisms giving rise to an infection in an individual case, and are employed in that case only. The preparation of such vaccines sometimes becomes necessary because of the peculiar nature of an infection. Pharmacists do not often have occasion to handle this special work. The stock vaccines are designed to

cover a broad range by embracing in their composition as many diverse strains of the organisms represented as possible.

The bacterial vaccines or bacterins comprise a very large class of biological products. They are composed of one species of organism only, or two or more organisms, the name of the product designating its composition. Thus, acne vaccine is a suspension of the *bacillus acnes*. Staph-acne vaccine contains in addition to the bacillus acnes, various strains of *staphylococcus*, etc.

One product of this group, *typhoid vaccine*, has come into very extensive use as a prophylactic measure against typhoid fever. Its use is now compulsory in the U. S. Army and Navy, and has become a routine measure in several European military organizations. Its use has practically eliminated typhoid fever from the military camps.

THE PHYLACOGENS.

The most recent development in this field is a new class of bacterial derivatives termed *phylacogens*. These are distinct from the bacterial vaccines in that they contain none of the bacterial cell substance. They are sterile aqueous solutions of the metabolic substances or derivatives generated by bacteria when grown in artificial culture media. The bacteria, first killed, are removed by filtration through porcelain. A considerable variety of pathogenic bacteria are employed in their preparation, the different organisms being present in about equal proportions. A basic phylacogen is first prepared and is known as *mixed infection phylacogen*. The specific phylacogens are prepared by adding to this basic material an equal proportion of the filtrate obtained by growing and treating the organism considered to be predominant in the pathological condition. For example, in the preparation of *rheumatism phylacogen*, a strain of streptococcus—*Micrococcus rheumaticus*—is grown and treated like the several organisms entering into the preparation of the basic phylacogen, and an equal portion of the filtrate from this product added to the mixed infection phylacogen. There are also marketed gonorrhea phylacogen and erysipelas phylacogen.

THE TUBERCULINS.

Another group embracing some four score products are the *tuberculins*. These are employed in the diagnosis and treatment of tuberculosis. Some of these products are employed very extensively. They will be treated upon in another paper.

There are also the various tests for syphilis, typhoid fever, and cholera, and the various products for veterinary use, which time and space do not permit the writer to enumerate.

There are, however, three distinct classes of biologic products: Serums, those products derived from the blood of animals; viruses, those products in which the infective material itself is employed; and the bacterial vaccines, which contain the dead organisms in suspension.

In closing, the writer will quote from New and Non-official Remedies, 1912; published by the Council on Pharmacy and Chemistry, American Medical Association:

"The vaccines, viruses, and serums constitute one of the most important groups of drugs with which the physician has to deal. Some preparations of this group are specific cures for certain diseases; others are invaluable in prophylaxis and diagnosis. The great importance of exercising some degree of governmental control over these products was recognized by the passage by Congress in 1902, of a law entitled 'An Act to Regulate the Sale of Viruses, Serums, Toxins and Analogous Products in the District of Columbia, to Regulate Interstate Traffic in Said Articles, and for Other Purposes.' The law provides for the licensing of manufacturers who make these products. In order to obtain such a license it is necessary for an establishment desiring it to request the Surgeon-General of the U. S. Public Health and Marine Hospital Service to have an inspection made of its laboratories, methods, products, etc. This inspection is made by an officer of that service, and consists in a careful examination of the stables, laboratory facilities, methods, animals, collection of the serum, standardization, and tests for potency, purity, and amount of preservative employed. Samples of the products from licensed manufacturers are bought on the open market and examined at frequent intervals in the Hygienic Laboratory of the P. H. and M. H. Service. The inspection of the laboratories is repeated at least once a year, and if unsanitary conditions are found, or if the products are not what they are claimed, the license is suspended."

SOME CHRISTMAS ADVERTISING.

How Different Druggists Attract Holiday Shoppers and Stimulate the Demand for Gift Goods—Suggestive Newspaper Announcements—Booklets and Special Sales Schemes.

In view of the general prosperity this year, merchants look forward to a big holiday business. Have you made any plans for furthering the sale of gift goods in your own store between now and New Year? A little publicity given to that department of your business will bear fruit. The lure of department stores is so great that the druggist must do special advertising if he expects to accomplish much during the holidays. His Christmas offerings should be brought to the attention of Yule-tide shoppers with all the flare of the general retailer. There is nothing unethical about it. There is just as much ethics in honest business as there is in honest pharmacy. A little attention to the commercial side of pharmacy at this period of the year, a little judicious advertising, if you will, is more than justified by the results.

Many druggists have laid in a special stock for the season, and the question arises, "How can they dispose of it?" Our answer is advertise. Let the people know about your wares. Start early if you can, but remember that people who are thoughtful enough to buy their Christmas presents before the rush are in the minority. Most of us leave it to the last week. So concentrate your efforts on that period. Don't be afraid to spend a little money on your holiday sales. The profit justifies a little appropriation for advertising, say five per cent or more.

GOOD ADVERTISING MEDIA.

Employ the newspapers if you can afford it. If not, use circulars, folders, or booklets. In small towns druggists can employ the newspapers to good advantage. The McCoy Pharmacy of Dassel, Minnesota, have in the past run whole page ads. in the local daily. But, of course, such a splurge is not always possible, nor always necessary. Display ads. of a sixth of a page may be used to feature candies, perfumes, toilet sets, or any articles offered especially for the season. But they must be changed often or many items will escape mention. In large ads. it is well to run illustrations profusely, but in small insertions the dealer had better confine himself to type. Set the headline in bold letters and make the text as pointed and forcible as possible.

Don't forget Santa Claus. Although this is the twentieth century, he is as much in evidence this season as ever before. Swing the old gentleman into your advertising if you have the space. If you have room, set him up in the window. Talk about him in your type. Tell how he obtains his supplies from your stock. Run his picture in your advertising. He is a pleasing old character, if he is fictitious, and casts a genial spirit over your advertising.

We have alluded to the distribution of booklets and circulars soliciting Christmas patronage. Next year druggists should try that particular style of advertising because the parcels post, which takes effect January 1, will enable dealers to supply the rural residents with gifts without defraying excessive carrier charges. The proprietor need only send a circular to each person on his mailing list to stimulate purchases. Let him give each reader a straight-from-the-shoulder talk on the gifts in stock, and at intervals throughout the ad. call attention to the fact that deliveries can be made by parcels post.

Remember that advertising does not stop with the newspaper page. It only begins there and should travel every legitimate path—posters, window trims, counter displays, circulars, and booklets. Wm. V. Dufner, Ph.G., proprietor of the Bradley Avenue Pharmacy in Peoria, Illinois, last Christmas sent out a letter printed on paper somewhat larger than ordinary writing stationery. It may appeal to some of our readers:

So this then, my friend, is my Christmas Greeting to you across the trees and chimney tops.

We have enjoyed a splendid business this past year, and at this season of good cheer and good will we want to thank you sincerely for your kind coöperation.

We earnestly trust the year just closing has brought to you and yours many heart throbs of friendship and abundant prosperity. And our wish for 1912 is unprecedented blessings. Your friend,

BRADLEY AVENUE PHARMACY.

Peoria, Illinois
December twenty-second
Nineteen hundred eleven

WM. V. DUFNER, *Prop'r.*

B. S. Cooban & Co., of Chicago, employ a large bill-board placard to remind their customers of Christmas purchases. The paper is a white stock 2 1/3 by 3½ feet in dimensions. The ink is red and blue, making a very flaring ad.

THREE HOLIDAY
SUGGESTIONS

WATERMAN'S
IDEAL FOUNTAIN PENS
The Best, $2.50 to $10.00

HUYLER'S CANDY
Always Fresh, 60c. and 80c. per pound

EASTMAN KODAKS
From $1.00 to $25.00

B. S. COOBAN & CO.
DRUGGISTS
63d Street and Normal Avenue

This bill-poster used by Mr. Cooban was of immense size, and is of course greatly reduced here.

W. G. Price, of Toronto, South Dakota, last year sent out a large four-page letter to attract Christmas trade. The paper was a yellow stock 8½ by 11 inches in dimensions. The type was black. Mr. Price believes in special schemes that enlist the interest of holiday shoppers. Two plans that he tried were set forth in detail in the letter. To quote:

DON'T FAIL TO READ EVERY WORD OF THIS LETTER. Some place in it you will find a number—the duplicate of which has been filed in a box and deposited in the First National Bank. Mr. Peterson will be requested to shake the numbers and draw one. To the party producing the letter whose number corresponds to the one he has drawn, he will give a $2.50 Gold Piece.

But better even than this, this letter means many dollars to you in savings if you will read and profit by it. First of all, we want to tell you of our profit-sharing scheme, the details of which many of our friends do not fully understand. Our new cash register prints for you a receipt for every cash purchase you make. These receipts are good for 10 per cent of their face value, as one-quarter of the purchase price of lockets, chains, bracelets, necklaces, brooches, scarf pins, cuff buttons, silver, ormolu gold, and articles without end. Supposing you have $10.00 in register receipts. These are good for $1.00 on a $4.00 purchase. That is, these receipts and $3.00 in cash will purchase a $4.00 article in the lines we have mentioned. Sort of worth while, isn't it?

And the reputation we have made for quality in Christmas goods is not going to suffer this year. We have, as always, a line to meet every purse.

The Fred Glass Drug Co. of Petoskey, Michigan, distributes a little booklet 4½ inches wide and 6¾ inches high. The paper is a light stock, so that the booklet can be folded and mailed in an ordinary envelope. The cover bears the title "Holiday Announcement." Two of the inside pages read:

WE GUARANTEE TO SHOW THE
LARGEST AND GRANDEST DISPLAY
OF
HOLIDAY GOODS
EVER SHOWN IN THIS PART OF THE STATE

Everything new,
direct from the importers.

Specially Made, Designed, and Exclusive
Toilet Articles Manufactured
to Your Order.

One page in the Fred Glass Drug Co. booklet.

CHRISTMAS
SELECTIONS

Made Early, before the lines are broken, will greatly further your own interests and convenience.

Goods will be sent on approval to persons known to this house.

SPECIAL GOODS

Many of our goods are made exclusively for our Holiday trade, so you get style as well as price.

Another page.

One feature common to much of the literature used for advertising purposes during the Christmas season is a list of the different articles that are offered for sale. The following assortments of goods and prices appear in the

booklet of the Fred Glass Drug Co., already referred to:

FOR THE LADIES.

Sterling Silver Novelties	$ 25 to	$10 00
Silver Toilet Sets	2 00 to	25 00
Gold Toilet Sets	3 00 to	12 00
Ebony Toilet Sets	1 00 to	6 00
Walnut Toilet Sets	2 00 to	5 00
Rosewood Toilet Sets	1 00 to	3 50
Jewel Cases—Silver	50 to	3 00
Jewel Cases—Gold	75 to	5 00
Triple Mirrors	2 00 to	6 00
Hand Mirrors	10 to	5 00
Hand Bags	2 00 to	6 00
Manicure Sets	50 to	5 00

Music Bags, Fancy Whisk Brooms, Writing Sets, Post Card Albums, Stationery, Fountain Pens, Traveling Sets, Fancy Calendars, Perfume Atomizers, Handkerchief Boxes, Glove Boxes, Puff Boxes, Desk Novelties.

Perfumes	$ 10 to	$10 00
Toilet Waters	25 to	2 00

Brushes and Combs, Pictures, Photo Holders, Novelties of all kinds, Art Calendars.

Books	$ 25 to	$ 1 25
Box Candies	25 to	5 00

Candle Sticks—Bronze, Silver and Gold; Travelers' Drinking Cups, etc.

FOR THE CHILDREN.

Books—linen	5c to 25c
Books—Stories for Boys and Girls	10c to $1 50

TOYS.

Magic Lanterns, Railroad Trains, Street Cars, Electric Toys, Rubber Dolls, Moving Picture Machines, Candy, Stationery, Pictures, Post Card Albums, etc., etc.

FOR THE MEN.

Shaving Sets	$1 00 to	$ 5 00
Collar and Cuff Boxes	75 to	3 00
Collar and Cuff Bags	50 to	2 00
Safety Razors	1 00 to	5 00
Smokers' Sets	1 50 to	4 00
Tobacco Jars	50 to	2 00
Fancy Pipes	50 to	3 00
Hat and Clothes Brushes	35 to	2 50
Necktie Boxes	75 to	2 00
Fancy Ink Wells	35 to	75
Desk Novelties	25 to	50
Bill Books	50 to	2 00
Fountain Pens	50 to	2 00
Post Card Albums	50 to	1 50
Cigars, per box	1 00 to	6 00
Traveling Sets	1 50 to	5 00
Muffler Boxes	50 to	2 00

Card Cases, Fancy Playing Cards, Toilet Waters, Stationery, Ash Trays, Necktie Holders.

DEN SUPPLIES of all kinds.

Den Pictures, Match Boxes, Pipe Racks.

Shaving Mugs and Brushes	$ 50 to	$ 2 00
Military Brushes	1 00 to	8 00

FOR HOME AND CHURCH.

Christmas Candles, Tree Ornaments, Christmas Bells, Santa Claus Snow.

Trimmings and Signs of all kinds for Christmas.

Bibles, Empty Holly Boxes, Christmas Postals, Christmas Seals, Books of all kinds, Candle Holders for Trees, Diamond Dust, Tinsel, Etc., Christmas Tree Holders.

It will be noticed that the foregoing lists are divided into sections for the men, for the women, and for the children. That is a wise arrangement, because it enables the reader to make a selection much more quickly than he could from a miscellaneous lot of gifts.

DISPLAYING THE GOODS.

By way of supplementing the newspaper advertising one must look carefully to the display of the goods. Christmas wares should be exhibited in the window. If the druggist has laid in a large stock, it is advisable to set a few tables in the store, and show goods on them so that customers walking down the aisle can see the gifts at close range. The counters, too, should be made to do service.

The window should resemble that of a pretty bazaar and present a selection so varied that all gift buyers will be attracted. Use price-cards liberally. The perplexing question at this time of the year is what articles to buy that shall combine moderate cost with other good qualities. People can see by glancing in the window how appropriate are the gifts on display, but they can't tell the prices unless they be plainly indicated. Christmas candies are, of course, one of the most important items during Christmas week, and should have conspicuous position everywhere. Military brushes make useful gifts. Toilet and manicure sets are nice presents for women, and should be brought to the front. Cigars in Christmas boxes are good sellers. Pipes, briar or meerschaum, are more popular than ever. Then there are cigar trays and other articles that appeal to smokers. Fountain pens are an old standby and can always be depended on for a good volume of business.

Cutlery and books, too, make good gifts. In fact, almost everything of genuine usefulness can be sold as a Christmas present. Suggest all of the mercantile articles that you possess to buyers. There is no accounting for taste. Furthermore, a reaction has set in

against giving trumpery and ornamental articles as Christmas presents in favor of things that are sensible and useful. Tell the public in your advertising that your stock of Christmas gifts have been selected with an eye to their utilization; that while you have large varieties of holiday merchandise in which every taste and style are centered, still service and practicability have never been overlooked. This argument will appeal to the great mass of people who are looking for sensible goods as Christmas gifts.

THE POWER OF SUGGESTION.

Many persons have no idea of what they want until they get into the store, and then are only confused by the mass of suggestions. Help them out in advance by suggestions in your advertising.

Here is a good pointer for the advertiser: For the infant there is so and so. For the boy there is a certain line of goods. For the girl there is that list of articles to suit her taste. For the matron there are things of service in the household. For the men there are the razor and other articles. Enumerate the gifts that belong to these classifications.

Another good plan is to give lists of articles for certain sums. For instance, 5 cents will buy so many things, 10 cents so many articles. For 25 cents, have another list. Let 50 cents head other bargains, and so on. What holiday shoppers look for principally are suggestions. Their minds become confused before an embarrassment of riches, and both the ads. and the talk of the clerks must help customers to make their selections.

Of course, there is a large personal element in selling holiday goods. The good storekeeper is a judge of human nature, and the moment Mrs. Smith or Mrs. Jones enters his store, she is greeted with sound suggestions as to what to buy. He puts himself in the proper attitude, listening deferentially to her ideas, volunteering suggestions of his own, until the woman goes away happy in the completion of her Christmas purchases.

In his daily personal intercourse with customers, he is an encyclopedia of suggestions, so should he be in his advertising. And if his ads. properly express the sentiment of the season and the business, his Christmas advertising will prove suggestive, timely, and helpful.

"MY BEST PAYING SIDE-LINE."

The Ninth of a Series of Commercial Articles—The Author Finds This the Big Season for Jewelry and Silverware—The Range of His Stock—How He Buys the Goods—What Brands to Choose—How to Run the Department.

By E. L. MAFFITT,
Oakdale, Iowa.

My best side-line in a financial way is jewelry and silverware. Any druggist who goes into this business must conduct it in accordance with the conditions that obtain in his particular locality. For that reason our method of running this department of the store is made to conform with our own patronage.

We do not carry a large line of silverware and jewelry, but we try to keep it fairly complete. Our assortment is just large enough to show people that we have such goods in stock. The jewelry sets next to the cigar-case, and the silverware, in turn, rests in a case next to the jewelry.

THE JEWELRY LINE.

Our line of jewelry includes a few chains, fobs, brooches, cuff buttons—in fact, all the little things that are usually given away as presents. In watches we carry only the cheaper ones. Later on I shall explain how we handle watches, diamonds, and other ware that sell at a high price.

For a time we sold the highly advertised Ingersoll watches, and personally guaranteed them. But we did not like the methods of the Ingersoll people, and now we do not recommend any of our fellow druggists to handle this brand. The makers do not make the concessions to the dealer that some houses do.

When we carried their watches, and whenever we guaranteed them personally, we did so at a danger of loss. If we returned defective watches to the company, they charged us 25 cents for exchange. We remonstrated, but were informed that that was the Ingersoll way of doing business, and that the house did not want us to personally guarantee the watches. One of our customers sent his watch directly to the Ingersoll establishment and never received any reply.

We now handle the "Derby" watch that sells for $2.00, and the "Mentor" and the "Guide," which retail for $1.00. These watches are obtained through Otto Young & Company of Chicago. We also sell a $1.00 watch which we buy from Butler Bros.; it is called the "Uncle Sam." The latter bears a printed slip which tells the purchaser to return the watch to the dealer if it is unsatisfactory. When we send back the watches we are given credit for them, so you see we now carry watches which are guaranteed to us in a manner that enables us to put our own personal warrant back of the goods. That is what counts. Since we have put in such a line we have no further trouble over the question of guaranties.

SILVERWARE.

We handle the different lines of silverware. But when we find a brand that is advertised in the mail-order catalogues, we omit it from our stock. You may think that some brands are unavoidable because of their great popularity. But the fact remains that the druggist can omit from his stock any brand of silverware that he chooses. He can do that for the simple reason that he can kill the sale of any piece of silver and jewelry by merely withdrawing from it his own personal guaranty.

Let me illustrate this from some of our own experiences in the last three years. Our big sales are in December. Three years ago all of the silverware which we sold was "1847 Rogers." Later we were surprised to see this line mentioned in mail-order catalogues. We proceeded at once to reduce the demand for this particular brand. As a result of our efforts the following year less than one-fifth of our sales were of Rogers goods. In December, 1911, we made one sale only of this ware. It consisted of a half-dozen dessert spoons, and the only reason we sold them lay in the fact that the customer who bought them was matching some table ware which he had obtained from us before. I merely mention all this so you will see that the main thing to do is to work up a reputation for yourself as to quality so that you can sell any good brand that you may choose.

DIAMONDS.

A word as to our method of selling diamonds and similar pieces of jewelry. We deal with Otto Young & Co. of Chicago, who, without doubt, are as liberal, prompt, and reliable a firm as one can find. They do not send goods on consignment. But if you have a customer who wants something not in your stock, they will send you an assortment on memorandum. If you wish to sell a diamond or a watch, find out how much the customer is willing to pay and get a fair idea of what he wants. Then order a number of different styles from which the customer may make his selection. Let him understand that he is under no obligations to make a purchase if the goods do not suit him. The dealer is allowed to keep a shipment ten days. I kept it longer this winter, as the roads were so bad that my customers could not get here in that time. You can rest assured that if you do your part. the wholesaler will do what is right.

ENGRAVING DONE FREE.

We have no jeweler, so we send our engraving either to Otto Young & Company or to an engraver in a near-by town. Their charges vary with the kind of work, but any one may obtain a list of their prices. I send most of my engraving to a neighboring town because I can always find some one to take it there and thus save carrier charge.

We advertise that we do engraving free. In buying new goods, wherever I can, I have the goods engraved by the jewelry house from whom I am making the purchase. It costs us to have engraving done, but we make a good big profit on what we sell and can, therefore, afford to make no charge for the engraving. Of course, the amount of free engraving that we offer is restricted. We permit only script and old English letters, not over three of either, nor more than one name. This is explained to the customer at the time of the sale.

In conclusion let me say that a good business can be worked up in jewelry and silverware by the retail druggist, but it must be done on a quality basis by a druggist who has a reputation for quality to begin with.

THE INFLUENCE OF LITTLE THINGS.

By WILLIAM F. MORGAN, Ph.G.,
Brooklyn, N. Y.

During the course of my business experience I have found a sense of true satisfaction and worth, not to myself alone, but to my employer and the public, in little things. They aid us in this profession, and anything that helps to make work a pleasure is an asset.

To my mind it is a very poor business that is conducted with no feeling of sentiment attached to it. We hear that "there is no sentiment in business," but I believe there is.

The clerk who has a clean, tidy personal appearance, whose face shows an equally clean inner self and a cheerful smile, who tells the time of day to the customer, be he man, woman, or child, and assists them in what they may want, who will sell stamps as willingly as medicine, who makes a tidy package, shuts drawers completely, puts bottles and containers away in their proper places at once, performs in these acts a number of little things which enhance his value to his employer, to himself, and the business world.

Speaking of a tidy package, never use paper too large or try to use too small a piece, nor tie with string a package containing capsules, pills, or powders. Use elastic bands or sealing-wax, which help to preserve a professional air about your work.

When prescriptions are compounded for foreigners who may not be able to read English, see whether they thoroughly understand the directions for their use. Explain in as simple language as you can what is needed and they will appreciate it. You can deliver to the customer without saying a word in this connection whatever you have compounded, but the influence of a little thought on your part has a weighty effect upon the patron. People observe that you are interested in their welfare when you see to it that they know how to administer the medicine. It may be said that such explaining should be done by the physicians, but they are busy men, and some are less thoughtful than others.

At this time I may well call attention to another little thing under the head of "explaining." Whenever you have a mixture in which effervescence takes place, such as spirit of mindererus, Basham's mixture, etc., always explain that it must be kept in a cool place. A gummed sticker may be used for the purpose of explaining that in case the fluid were placed where it would be warmer than it was when made, additional gas might be given off; and that if corked too tightly the bottle would break. One might add that it had not soured or fermented.

There are times when a change of color will be noticed, as in freshly prepared elixir of the phosphates of iron, quinine and strychnine U. S. P., or ointment of resorcin compound N. F., and some proprietaries. Mention of this to the customer satisfies him and saves lots of talk at the wrong time—*i.e.*, after the damage is done.

One's influence with children has its good effect. Know them. Select for them the best. Give them no mutilated coin in change. Let their parents know that they can get as good treatment as their elders. Don't be above saying "Hello" to them on the street. Still conduct yourself in such a manner as to avoid undue familiarity. Behind the counter, be careful not to let the public get the impression that you are avaricious or in common terms "soaking them." It is my impression that they don't like to think that they are making you rich.

Some may say, "I don't care about the public, I am looking out for myself." They do care or they would not be in business. I do not believe that men actuated by that spirit make a permanent success, for we must all be governed by a fair regard for one another.

Have the confidence of the physician. Let him know that you dispense what he likes, even if it be of proprietary manufacture, and he does not specifically note the maker's name. Have him feel that it is not necessary to do so. This is a little thing in itself, but it has considerable significance.

A good and lasting impression can be made in the arrangement of the store and the windows. Never display in your windows toilet paper and laxative waters together, syringes, douche pans, etc. If your customers find that

they are well treated in dealing with you for their other needs, when they want articles of this kind they will come and ask for them. Such articles displayed create a more or less morbid interest in the young which we should guard against, and is worthy of your consideration.

Because the public do not see behind your prescription counter don't lose sight of the necessity of keeping all utensils as clean as the dishes you eat from, and the towels on a par with what you have at home.

In summing up, I find that the golden rule is still very applicable to our use.

"SKIN GAMES" I HAVE MET.

The Bunco Man—His Affable and Amiable Ways—How He Fleeces the Lambs—"Sure Things" that Tempt the Unwary.

By H. KALLIWODA, Jr., Ph.C.,
San Francisco, Calif.

Bunco games are as old as the sands of Egypt. But they are still worked for one of two reasons: either the victim is green, or he is taken unawares and forgets the old trick. The old saying is that "a sucker is born every minute." So for those who have not yet bitten, but who may bite, the following little "flimflams" will serve as danger-signals. When you meet a danger-signal, slow up—never round the curve too fast, for you may run over an unseen bank; and believe me, you'll cuss your speed!

A good general rule is that when a promoter, strange salesman—I mean one from a strange concern—or an overaffable customer comes to you, slide your brakes a little and get the emergency ready. Think the proposition over, tear it to pieces, look at it from all sides, eye it with suspicion, and—*take your time*. If you are in a hurry, tell the man so—but don't grab a thing because it looks good. It may be a red-hot gold brick, and then you'll burn your fingers.

CONFIDENCE MEN SMOOTH LOOKING.

Those who come for bunco purposes are generally men to all outward appearances, gentlemen. They are well dressed, good looking, elegant and suave in manner and speech, and generally educated. This sort of man is to be most dreaded—he is always after a big haul. He will sell you stocks—interests in mirages—or he may give you something for nothing, something for your testimonial because you are a prominent business man.

One favorite game of these "smooth articles" is to give you a lot in some beach whose future is golden. The lot is yours for a testimonial and the use of your name. He will show you maps and tell you all about it—what a fine lot he has given you—wouldn't you like to buy the adjoining lot for $500—it would make a nice residence lot, while the gratis lot is the finest kind of a business location. Yes, may be you want to take a chance and buy one from this "nice man." If you do, you are stung for $500 more than you were after he had given you the first lot. Well, maybe you're hard up or a bit cautious and don't buy a lot. But if you take the little present you're stung anyway. For surely you will pay for bringing the title down, only $20. Then they find that next year's taxes are due on your $1500 lot. Yes, taxes must be paid. You give the "nice man" the title fee and the taxes. Next week he sends you your title on a nice clean piece of paper. "Oh," you cry. "Gee, I'm a popular gink. This just for my name and testimonial!" You read the enclosed letter, and you are informed that the street work is about to be done and $30 surveyors' fees are asked of you. A month later you are sent a bill of $100 for street work. Then you investigate. You travel a hundred miles to see your beautiful lot and street work. But after walking along the shore for forty miles you find the lot given you is now at the bottom of the ocean, or may be in some gully. Oh, gee—you're stung!

A CIGAR HOAX.

But you say never again. That was yesterday. To-day a slouching Mexican with heavy overcoat drawn about his ears slinks up to you and whispers: "I bringa da gooda cigarros. I smuggle them in. Looka here;"

and he opens a nice fancy box of 100 cigars with a nice silk ribbon and plenty of gold paper. He quickly pulls out a bunch of fifty and says, "Look." You look at the ends—they seem to be nice, and you are interested. Quickly and with apparent carelessness he pulls one out from the center of the bunch, cuts off the end and shoves it into your mouth. Before you realize what has happened he has a lighted match at the end of your Havana and you are puffing the finest smoke you ever tasted. Isn't it cool, rich, and aromatic? "Gooda cigarros—no? $10 a hundred—you like to buy? I hurry—police—." You may buy or you may beat him down to $7.50, to which he skilfully and reluctantly agrees. He leaves as silently and mysteriously as he entered. And you are going to sell the "El Regias" for 15 cents each.

Carefully you remove the dainty silk ribbon and—another lemon—you are looking at a bunch of stogies, wondering how those "El Regias" were transformed to "El Ropos." They weren't. The greaser had that "swell smoke" spotted. It was the only one in the bunch and cost you $10.

ANOTHER DECOY.

A third type of swindler is the man with a "good preparation" and "We are going to spend a fortune advertising" story. I was in a country town when I met this "skin game." The salesman came in and said, "Good morning, my name's Skinner, etc.," and then started handing out this line of talk: "Oh, I'd like to show you the squirrel poison you are going to sell this season. It's a wonder, and we are going to pour gold down your main street to advertise it. I'd like to sell you some at our special figure." The druggist told him that business was too slow, and was met with: "This is a gilt-edge proposition, but the goods are new to you and I don't blame you for not stocking up—I'll just give you a fifty-cent box gratis so that you can supply your first demand, and here is our card. We have a branch office in your city and do business direct. If you want more, just call us up. It's $4.00 a dozen." And with that he left. A week later a farm wagon stopped in front of the drug store and an old farmer came in and asked if they carried 3X squirrel poison. When told they did he said: "Well, give me about a hundred cans. I'm gonna set my 20 acres out with thet 'ar stuff. It's the darned best thing I ever saw to take the sap out'n a squrl. Yuh can't git it everyware, neither." The druggist said he was sorry not to have more than one can in stock, but would get the rest for him. So the farmer said he'd be around for it on his next week's trip. The druggist went to the 'phone and ordered 1 gross at $4.00 a dozen less 5 per cent for cash. The goods arrived and he paid $45.60 cash. The sequence? One gross cans of sawdust and sand on hand! Bit again! Needless to say the other three stores in the town were victims also, and the company skipped.

THE CHARITY RACKET.

Another very popular humbug is the selling of tickets for an entertainment to be given in a neighborhood hall for the benefit of "John Jones, the barber—you know—down the street a few blocks. He was badly burned in a fire and lost his sight. He was a neighbor, and his friends are your customers. Buy a couple of tickets and come over to the minstrel show." Your tender spot is touched and you don't want to offend the "gentleman" doing the charity stunt, so you fall for it, and on the tenth of the next month you and fifty other easy marks stand out in the cold in front of a closed hall. The crooks had time to work the whole city and "beat it." Stung again!

But by far the most popular "skin" is for a salesman to inveigle you into buying a bill of goods by juggling figures. This is practiced by representatives of respectable houses as well as others. The glib salesman has a fine article at $2.00 a dozen. Buy a gross and he gives you two dozen free, which sell for $8.00, the gross costing you $24. He tells you he gives you $8.00 off. That's a saving of 33⅓ per cent. He says this so fluently and nicely that you don't see through it right away, or else you don't stop to figure that those two dozen are only worth $2.00. Well, maybe you're the "fall guy" again. If you are, when you come to you'll find you are loaded up with 14 dozen. None are sold yet, and they cost you $1.72 a dozen instead of $1.33. Another lemon song—to the tune of 14 per cent! Expensive song!

BLACKMAIL.

The crudest game I have ever heard of being pulled off is a blackmail scheme, rank and raw. A man came to a store where an unregistered clerk helps out and asked for 10 cents worth

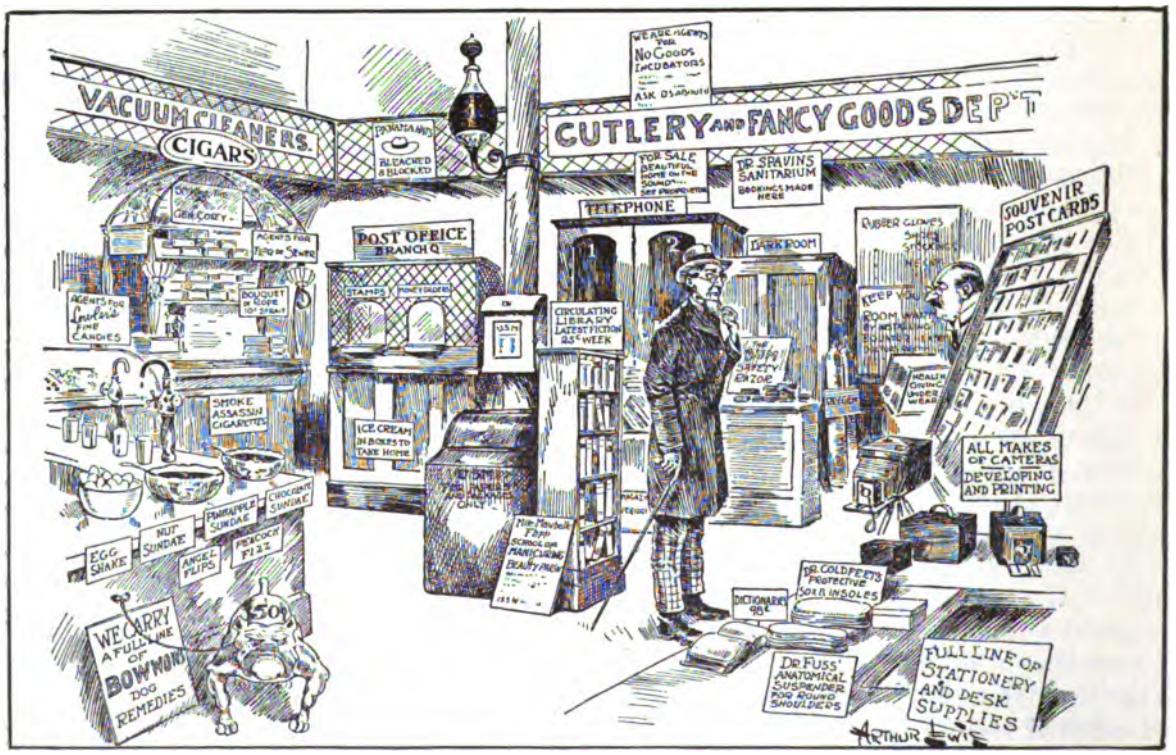
of Rochelle salts. The boy took one of the ready-prepared 10-cent packages, wrapped it up, and sold it. Three days later the man came back and said the Rochelle salts had poisoned his wife—burned her stomach, weakened her heart, torn her bowels, and nearly killed her. The package contained powdered chlorate of potash instead of salts! He said he could prove it. He was going to sue for $10,000 unless he could make a settlement. He would rather settle outside of court, because he had no stack of bills to prosecute, although his lawyer would take the case on the outcome. Mr. Druggist, fearing publicity and a ruined business, was eager to settle, and before he knew it his name was attached to a $500 check. Later he thought it over, had the other 10-cent packages of salts tested, found no potassium chlorate, and putting two and two together, figured out that he was—stung once more!

FAKE OFFERS.

A little trick of some salesmen, cigar salesmen in particular, is to sell you a bill of goods for a window display. You get your bill of goods, you get a window display, and you get a promise that when the free goods come in the salesman will bring them to you. Oh! lovely. The cigar factory gets the benefit of the window and you never see the salesman again. It's simply a game to get your order. The maker should pay you for your windows and pay well, for they sell his goods much better than bill-boards do, for which he has to pay handsomely.

Salvage sales are to be carefully investigated. I know of a case where a man bought 20 gross of porous plasters at 3 cents each. He also bought two cases of effervescing salts at 5 cents a bottle. He hurriedly examined his goods on top and down a little way. But when he opened his cases at his store, he was dumbfounded to find that the heat had ruined the bottom gross of plasters completely. They were solid as rocks! And water had ruined the lower portion of each of the cases of salts. These were "doctored up" before he examined them, of course. Another poor boob seen raising his right hand in the atmosphere with the "never again" speech!

Moral.—"Look before you leap. Then count ten before you bite."



The Modern Drug Store.

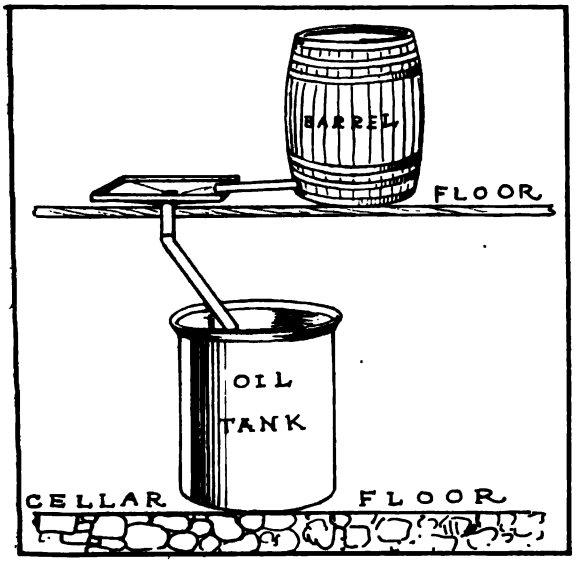
Stranger—(after looking about)—"Can you tell me where I can buy some quinine pills?"
[See editorial elsewhere in this issue.]

DOLLAR IDEAS

EMPTYING OIL FROM THE BARREL INTO THE TANK.

Henry J. Kamphuis, Fulton, Ill.: Our oil tanks are all down in the basement. We used to let the barrels of oil down and then pump the oil into the tanks. This was quite a job, so we invented a device such as you see in the drawing.

We had a tinner make a flat funnel about 2½ feet square and about 3½ or 4 inches deep. In the middle was a pipe about a foot long which went through the floor. Then we used a 2-inch conductor pipe which went from



How we empty oils into the tank in the cellar.

the funnel into the tanks. We obtained for the purpose three pieces of the pipe, one about 4 feet, one 6 feet, and one 8 feet long, according to the location of the tanks. Then we have a piece of gas-pipe about 6 or 8 inches long which we place in the barrel about 4 or 5 inches from the floor so as to let the oil into the funnel. We bored this hole in the barrel with an auger bit the size of the gas-pipe. We have a cork in the other end of the pipe, so that when we turn the barrel end up the oil will not come out after we have the barrel in place.

We pull the cork and let the oil run till the barrel is empty. This is a wonderful time and labor saver.

USING REAL COINS FOR PRICE MARKS.

N. E. Truman, Bainbridge, N. Y.: To simply lay a bright dime or quarter on an article displayed in the show-case seems, at first thought, a very neat way of marking the price. But it is too ingenious. We tried the plan and found that a large per cent of the customers did not "tumble" to what was meant. Questions like "Have you more money than you know what to do with?" or "Have you new coins for sale?" showed that our method was faulty.

When the purpose of the coins was explained, the questioner would exclaim, "How stupid of me not to see." His attention was diverted from the article displayed to his own mental process. To overcome this difficulty and still retain the advantage afforded by the novelty of coins as price marks, we hit upon the following improvement: On a small visiting card we typewrite with red ink the word "price" in capital letters. The coin or coins which equal the price of the article are then placed on the card below the letters. The result is a price mark which cannot well be misunderstood.

AN EASY METHOD OF DISPENSING POWDERS.

R. B. Conant, Hutchinson, Kansas: In making a large number of powders, after dividing them on a pill tile, a quick way to transfer each powder to the papers, already counted out and spread on the case near-by, is to use a putty knife and a spatula. Manipulate the putty knife with the left hand, putting the knife edge down on the tile and then sliding the spatula under the powder. The putty knife is used to push all the powder on to the spatula. Then the powder may be placed on the paper.

In dividing up a small number of powders, say twelve to eighteen, I put them on a powder paper and divide them there instead of on the tile. I always keep a small piece of cardboard cut the size of the powder paper. After the powders have been divided on the powder paper, I slip the cardboard under it. Then all the powders may be picked up on the board and by the use of a spatula can be shoved off onto the papers already laid out for them.

I find that both of these methods save time for me in filling a powder prescription.

SELECTIONS

SOME PEOPLE WHO COME TO MY STORE.

There comes creeping into my dose-and-price-crowded memory the beautiful spring morning when all the feathered warblers of nature were doing vocal stunts in the trees that would make even a slave to pills and powders chirk up and feel that the privilege of staying on earth and working nineteen hours per diem was a happy one. I gingered up, took a fresh grip on life, and decided to clean up everything around the store that even looked like work. I could feel vitality bristling from every pore. I entered the store, where the porter had everything shining like a sixty-cent stage diamond, I hurriedly entered the secluded precincts of my quiet little office and tackled the morning mail with all the vivacity of the proverbial duck that is reputed to have picked up speed when he spied a Junebug.

I had ripped open about one envelope bearing the pink stamp and a picture of the father of American liberty when there appeared, among the fumes of phenol and iodoform that were circulating in and out of my business boudoir, a tall, distinguished looking individual, wearing one of those shiny alpaca coats, an innocent looking white lawn tie, and a bunch of vines on the point of his chin. He looked the part of a Chautauqua warm-wind warbler who is strong on handing out cute sentences at the summer encampment at Boulder to the usual gathering of feminine freaks who have no chickens or children of their own and no mission on earth except to peek around in sad raiment and pant for higher life.

This particular consummation of the Darwinian theory quickly acquainted me with the fact that he was ambling up and down the earth in the interest of suffering humanity and the Skinnem Life Insurance Co. of New York, who were at present writing a contract that was simply something unheard of in the matter of benefits to the assured. It was a double-action, six-cylinder, high-geared, quadropneumatic, reciprocating policy, absolutely incontestable, and for an additional assessment of ten cents down and ten cents a week, payable at the company's office in New York, the hereinaforementioned company agrees to see that the assured gets by St. Peter at the gate. He was gasping for breath and fishing for his fountain pen to show me where to put my name when I gave him three seconds to evaporate.

The next disturber of my peace and dignity as an American commercial enthusiast was one of those lovey-dove little feminine confections, with an elegant assortment of hand-made blushes and high-priced hair enough to make the bearded lady in the museum dissatisfied with her job. She cast a scared glance in my direction, her lip did a tremble act perfect from long practice when she threw her talk factory in gear, and I began to absorb the intelligence that she was selling a book that should be in every home, an exhaustive treatise on every subject, from French-fried potatoes to foreign missionaries, with a goodly bunch of polished narrative about how to manage a husband, also how to endure life though married past the aid of the divorce court; and, best of all, this rare volume bound in limp calf in any color from picnic pink to the dull-dark-brown that you taste in the cold gray dawn of the morning after, only fourteen dollars.

It was here that my powers of endurance flunked on me, and every bit of bad temper and the fighting blood of my Southern ancestry were aroused. However, I decided not to murder her or drown her in her own blood, so I informed this ninety-pound consignment of human persuasion that I would buy one of these books, but I'd not buy two. She smiled one of those don't worry smiles as she crammed the heavy end of my twenty-dollar bank lithograph into her overgrown hand-bag, and flitted out, saying she hoped I'd be pleased with the work.

Again thinking I was monarch of all I surveyed, I pounced onto the letter on top of the pile and swore I would peruse its contents if the house was bombarded with heavy artillery. Presently there came a timid knock on my door, to which I did not respond. Then came a louder one, and then I thought surely the world was having its finish and quickly opened the door, fully expecting to meet the recording angel who was ready to check me up, but was surprised to meet my young hopeless, aged five, who had been assailing my door with a box opener and who said, "Dad, tan't you hear nuffin, it's dinner ready," whereupon I realized that another half-day had gone glimmering into the forever gone past. This, among a

million or two instances, proves to yours truly that when a knight of the tile and spatula says he will or will not do certain things he is either dippy or a prevaricator of the most abandoned type, and take it from me nobody on earth knows humanity who has not met and interviewed SOME PEOPLE WHO COME TO MY STORE.—W. H. COUSINS. Wichita Falls, Texas, in the *Practical Druggist*.

THE UNUSED FORCE OF NATIONAL ADVERTISING.

Eighty million dollars, in round numbers, are spent in this country annually in magazines and weeklies to create demand for articles having national distribution. This takes no account of other methods of advertising directed to the same end, such as posters, circulars, street-car cards, sampling, and the like.

The advertising is of a high class, prepared by men who have made a life study of the public and its tastes, and is immensely efficient in arousing consumers everywhere to a desire for the excellent products advertised. They naturally expect to be able to purchase the goods at the stores they patronize—but do retail merchants go half-way to meet that desire? Do they make known in their respective communities that they have the goods, that they have confidence in them, and that they are prepared and glad to fill orders for them? In too many cases the answer is "No."

This great and constantly stimulated demand goes frequently to waste. Supply does not meet it. Merchants as a class do not realize that an immense new trade is theirs for the asking. They do not utilize the fact that manufacturers create magnificent opportunities for local profit in preparing high quality goods, offering every facility to the trade to stock them, and advertising them broadcast among the consuming public.

There is waste—unused force—a nation-wide readiness to buy which too often expends itself in mere readiness, not followed by purchase, because the merchant does not do his part.

The situation is akin to the waste and deliberate neglect of the water-power which Nature has lavished on this land and which we do not avail ourselves of.

The actual water-power available in the United States is sixty-four million horse-power. The amount used is but five and one-third million horse-power—about 8 per cent of the whole. Coal, oil, lignite, are burned to keep going expensive boiler equipments, with their costly auxiliary gearing, while the POWER running down-stream unnoticed, unused, unthought-of, would abolish and replace it all.

The merchant is like a miller who stands by the side of a dam ready for his use, while he regrets the low production of his under-powered mill. The small effort required to install a turbine would bring him abounding prosperity. The merchant has but to reach out, by simple and economical methods of local advertising, and energize his whole business from the rushing and giant force of National Advertising.—RICHARD H. WALDO, Advertising Manager, *Good Housekeeping Magazine*.

SUNDAY CLOSING.

Wm. E. Lee, in a paper read before the Pennsylvania Pharmaceutical Association, discussed the subject of Sunday closing. He said:

"I am pleased to note that Sunday closing on the part of the druggists in my locality is progressing in a very satisfactory way. We have nine stores; seven of them close for a portion of the day.

"One of the greatest hindrances in Sunday closing is the fear that your neighbor will not close.

"To my mind the better way is to take the initiative and have others follow. One of my neighbors has closed his store for thirty years, in fact did so while my store was kept open. I am satisfied that only a very small part of his trade came to me while he was closed. It is, I think, a mistaken idea that the public demands an all-day service—in fact a large number of my customers have commended me for closing. It is only a custom, and the sooner we depart from it the more our services will be appreciated. It is self-evident that we cannot please every one. Every druggist realizes these facts no matter how late we keep open. Some one will step in for a postage-stamp, look in the directory, or use the telephone for an hour or so to talk to his girl, and the girl will talk to her young man.

"Sunday closing and shorter hours have been quite earnestly desired by me for a number of years, and I am satisfied that my loss

from a pecuniary point of view has been very small indeed; but I have received almost incalculable benefit from the rest in point of health. I hope that I may be spared to see the pharmacist have a reasonable number of hours of work accorded to him by the public."

Mr. Apple followed Mr. Lee with the following remarks:

"I have closed my store for three years on Sunday afternoon. I am situated in a Hebrew neighborhood, and have a Hebrew store one square south of me, and I found that it had no effect on my business in the least. I would not open my store again for the world on Sunday afternoon. Saturday is a hard day, and the following day, on Sunday, the trade is pretty heavy, but one must realize how much a few hours rest will do for a man and people will adjust themselves to the custom. Do not depend too much upon what your neighbors do."

INTOXICANTS AND TOBACCO.

We are drinking more alcoholic drinks than ever, more not only in gross, but per capita. So the Internal Revenue Bureau says after totaling up its receipts for the year ending on the 30th of last June. Here is its report of some of the products that paid taxes:

163,000,000 gallons of distilled spirits, 30,000,000 gallons more than the year before.

59,485,117 barrels of fermented liquors, an increase of 3,000,000 barrels.

7,600,000,000 cigars, 160,000,000 more than 1909.

6,830,000,000 cigarettes, an increase of 1,000,000,000.

402,000,000 pounds of plug, fine-cut, cube-cut, granulated, or sliced smoking or chewing tobacco or snuff,. 4,000,000 pounds more than the year before.

141,862,282 pounds of oleomargarine, 50,000,000 pounds increase.

It appears that the consumption of spirits increased last year by over twenty per cent. Perhaps taxes were paid on more liquor than was drunk, but the payments from year to year are a pretty close measure of consumption. That drinking should increase in the face of so much prohibition and local-option legislation causes some astonishment, but is not, we believe, contrary to experience. Legislation may have an effect on manners, methods, and details of consumption, but it does not change habits. Prohibition, if Maine is any criterion, does not help at all in promoting temperance. Local option may do good, but is more likely to benefit the rising generation than the one whose habits are formed.

It is possible that in spite of the Internal Revenue figures the manner of drinking may be improved and the drinks better distributed.

It bears on this subject that of the nine millions of population in New York State seven millions live in cities. Local option in this State is confined to country townships. The increase of city population all over the country has doubtless a relation to this increase in the consumption both of alcohol and tobacco. The nervous tension of city life is greater than that of country life, calling more for stimulants, and affording more convenient opportunities to get them. Drinking and smoking, too, are both social practices, and there is more society in the cities than in the country.

The consumption of spirits has increased more in proportion than the consumption of beer, and the consumption of cigarettes more than of cigars. The report is not complimentary to legislation.—*Harper's Weekly.*

MRS. MURPHY: Oi hear yer brother-in-law, Pat Keegan, is pretty bad off.

Mrs. Casey: Sure he's good for a year yit.

Mrs. Murphy: As long as thot?

Mrs. Casey: Yes; he's had four different doctors, and each one av thim give him three months to live.—*Puck.*

HERE'S A CHALLENGE!—The Williams Drug Co., 26th and Emerson Avenues North, Minneapolis, Minn., claims to have the heaviest trio of any drug store in the city, and the advisability is being considered of issuing a general challenge to the country at large. In our picture Mr. Williams himself stands in the center. A handsome gentleman, isn't he? The other two giants are Messrs. Tiegen and Gleason. The total weight of the three is 597 pounds, which is perilously close to 200 pounds apiece. When Mr. Tiegen went into the Williams store he lost his job in the employ of the Park Board, where his duty required him to maintain the lakes at a certain evel by frequenting the bathing places.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

MAKING CAPITAL OF THE PARCELS POST.

To the Editors:

Ask the average well-informed citizen his opinion of the parcels post law. He will stare at you blankly or dismiss the question with a mere "huh." But if you remind him that it goes into effect on January 1, he will be astonished.

We have had so much opposition to the parcels post, and likewise so much argument in its favor, that the public has tired of the subject and now gives it but little attention. Probably the greatest opposition came from organizations of retail merchants who saw only ruin in a reduction of postal rates.

Senator Bourne silenced this opposition, however, by his admirable adjustment of carrier charges. The entire country is divided into zones, the rates varying with the distances between these zones. Long haul rates will be reduced from 25 to 88 per cent of the present charge, depending on the distance. The local rates for shipments within a radius of 50 miles are reduced as much as 88 per cent of the previous charge.

Think what this will mean to the retail druggist! Don't suppose for a moment that it will enable the mail-order houses to gobble up all the business. Far from it. If you as a retailer are alive to your opportunity you will make capital out of the parcels post. In your circular and by newspaper announcements, impress upon your rural customers that you can now serve them better than ever before. Tell them that they can telephone in their orders or submit them by mail and have the postman deliver the goods at their doors the next morning. Let your rural customers know that there is no longer need of their coming to town to make purchases, because it will be extremely convenient to have goods delivered by parcels post.

Think what this will mean at planting and harvest time! Make it known among your customers that your local rate is five cents for the first pound, and one cent a pound for each additional pound up to 11 pounds. Thus to deliver 11 pounds by parcels post will cost only 15 cents on your R. F. D. route. If you wish, you can well afford to pay the postage on many of the orders.

Now, then, suppose you are surrounded by R. F. D. routes which branch out from your town like spokes from the hub of a wheel. Think what a hold this gives you upon your trade! Of course the parcels post law is not yet perfected, but time and experience will bring forth any new regulations that may be necessary. Thus far the law is a step in the right direction, and there will be no retrogression. If any changes are made they will doubtless be toward lower rates.

The time draws nigh when the parcels post goes into effect. On January 1 it will be upon us. Are you going to make the most of it or let some one else take the cream of your trade? Begin your plans now. Study your locality with a view to devising ways and means of obtaining all available business. Cultivate the farmer's friendship. Educate him to use the rural free delivery as commonly as he now does the telephone.

J. C. ARTHUR ST. JAMES.

Fort Morgan, Colorado.

WRITING SHOW-CARDS WITH A "GLASEPTIC NEBULIZER."

To the Editors:

I read the article on page 331 of the August BULLETIN OF PHARMACY by Mr. Peterson on writing show-cards with a "Glaseptic Nebulizer," and proceeded to give the plan a thorough trial. But I could do nothing with it. Mr. Peterson does not tell the particular size of Winsor and Newton's artists' color that he mixes with two ounces of turpentine. They make two sizes. However, I tried it out in all proportions with the same result, namely, plenty of spots, but no shading whatever. Anybody who has ever used turpentine to thin oil or Japan colors knows that if you get an atom too much it will stain cardboard or paper. I had no faith in the scheme, but was willing to try it. I felt that if the Nebulizer would work as he said, it would certainly be just what we are all looking for.

I should like to hear from others who have tried the Nebulizer, as to what degree of suc-

cess they had. If there is anything that I did not do right in the work, I shall be pleased to be corrected. E. A. BROCKWAY.

Rochester, N. H.

MR. PETERSON'S REPLY.

To Mr. Brockway:

Your letter addressed to the BULLETIN OF PHARMACY, stating that you were unable to get satisfactory results with the Glaseptic Nebulizer in making show-cards has been forwarded to me, with the request that I offer some suggestions that might be of assistance to you.

In the first place I must say that I cannot agree with you in your statement that "an atom too much turpentine will produce a stain," for I have sprayed mixtures varying in proportion from one tube of color to one ounce of turpentine, to one tube to eight ounces, and I never saw the slightest trace of a stain. In thinning oil or Japan with turpentine, it is the fixed oil that stains, not the turpentine.

The only difference I have observed is in the density of the shading, and it has been my experience that one *single* tube of ivory black to two ounces of turpentine gives the best result.

The spotting of your work is undoubtedly due to some of the solution getting into the straight or air tube of the Nebulizer.

Upon examining the Nebulizer you will observe that, on compressing the bulb, the air, in passing through the straight tube, *draws* the liquid through the curved tube, meeting it at such an angle, and with sufficient force, as to break it up into a very fine spray. But if you put some fluid in the straight tube, it will be expelled with the air and in large drops.

To make sure of keeping the air tube free from fluid, it is well to use only enough fluid to half fill the receptacle. Then there is no danger of splashing any into the tube when handling the Nebulizer.

Recently I have fitted a curved metal throat-piece, such as usually comes with the ordinary oil atomizer, to the Nebulizer instead of the glass tube which comes with it, and find that it does away with the necessity of frequently draining out the fluid which collects in the horizontal pipe.

Trusting that this information will enable you to get better results, and assuring you that I will be delighted to hear further from you, I am, ALEX. F. PETERSON.

Missoula, Mont.

THAT SULPHONAL PRESCRIPTION AGAIN: THREE REPLIES.

To the Editors:

In the September BULLETIN, on page 389, appeared a letter on the pricing of a prescription for one drachm of sulphonal in five powders. The writer of the letter charged 45

A WESTERN ASSOCIATION.—This group picture was taken at the recent annual meeting of the Montana Pharmaceutical Association, which was held in Boulder Springs.

cents, but his predecessor had asked only 35 cents.

I do not think any set rule can be used always, but in most cases the N. A. R. D. method does nicely. One drachm of sulphonal at $1.35 per avoirdupois ounce would cost 18½ cents. Double the cost of the sulphonal or 2 x 18½ = 37 cents; 37 cents plus 5 cents for container = 42 cents. Allowing three minutes for compounding at $1.50 per hour = 8 cents. 42 cents + 8 cents = 50 cents.

I also consider the following method a good one, which in this case gives the same result. Considering the cost of doing business as 20 per cent, which I think is about the average, we assume 18½ cents, the actual cost of the drachm of sulphonal, to equal 80 per cent of the total cost of purchasing and selling it. Thus, dividing 18.5 cents by 80, and multiplying by 100, we get 23 cents. 2 x 23 x 5 cents for container = 51 cents. But of course we would make it even money and call it 50 cents. By both methods an advance of 100 per cent is made on the cost of the drug, which is a fair return for a prescriptionist's services.

I consider the BULLETIN a great journal and always look forward to its coming.

Portland, N. D. A. G. AAL.

To the Editors:

We would charge 60 cents for a prescription of one drachm of sulphonal divided into five powders. We figure as follows: 60/437 is practically 1/7 of an avoirdupois ounce. Double the cost of the sulphonal and you get $2.70, which, divided by 7, gives 39 cents approximately. Add 20 cents for the time and knowledge required to prepare the powders properly and you get 59 cents. So we charge 60 cents in round numbers.

Some druggists do not make the proper allowance for the difference between avoirdupois and troy ounces when doubling the cost. In filling prescriptions, I charge $1.50 an hour for my time.

FRANCIS J. E. MOULEY.

Great Bend, Kansas.

To the Editors:

I want to say that Frank Fridgen can't be in business to make money when he puts up a drachm of sulphonal in five powders for 25 cents. See page 432 of the October BULLETIN. You know it costs him about 20 cents per drachm. I am calculating 7 drachms to the ounce, which is about right, I think. Forty cents is what I should charge.

Little Rock, Ark. S. D. KNOX.

ALL TRYING TO SAVE THE COUNTRY!

To the Editors:

In accordance with your earnest request I am sending you my portrait under separate cover to-day. [This was reproduced in the October issue of the BULLETIN OF PHARMACY —ED.] Our political campaign is warming up nicely, and we are beginning to get into the fray in earnest. You understand, of course, that I am up for reëlection to the House of Representatives of the General Assembly of the State of Iowa. We have a third party ticket in the State this year, but it does not involve the legislature, as both Progressive and Regular Republicans agree that Senator Kenyon should be returned and that he must be reëlected at our next session.

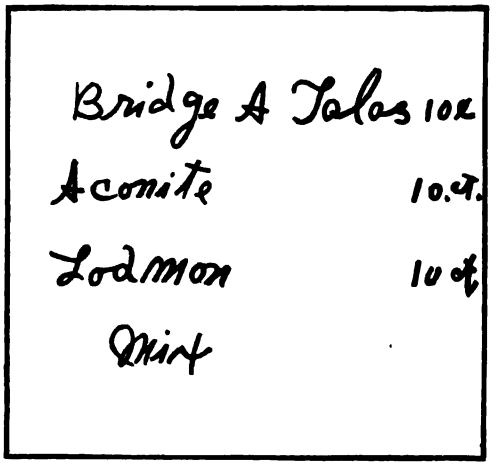
All varieties of political belief are now on tap in Iowa, from Regular Republicans and Democrats to the Bull Moose People, Socialists, Prohibitionists, and Anarchists—all anxious to save the country. Politics in Iowa this year are like what Bill Nye said of New England weather—all kinds at the same time! Thank the Lord, however, we had a good corn crop, and the hogs haven't got the cholera yet!

Eldon, Iowa. FRANK SHANE.

PHONETIC SPELLING.

To the Editors:

How is this for a prize-winner? For the first item we dispensed tincture of digitalis,



and it seemed to be what was wanted. The patient was a horse. L. R. SMITH.

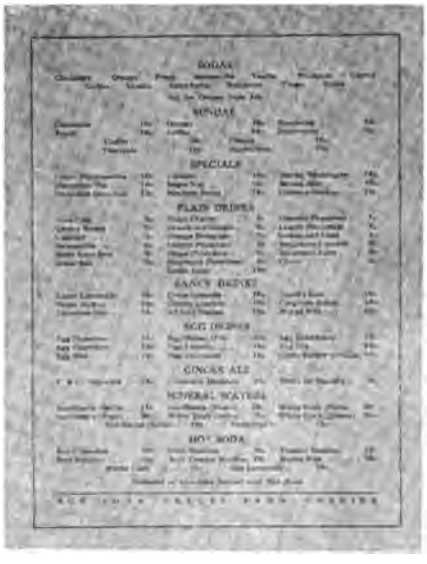
Cherokee, Okla.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

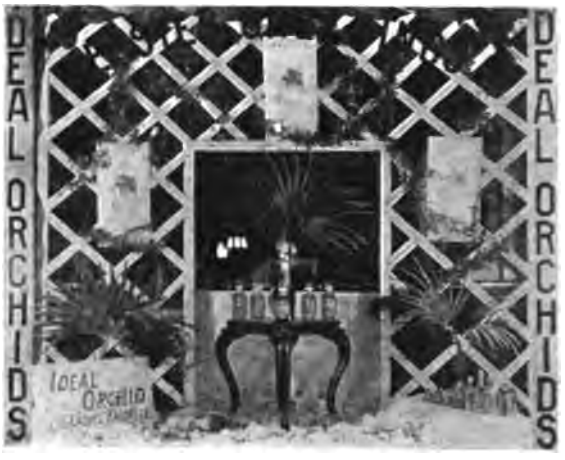
An Artistic Menu Card.—

F. H. Ridgway has one of the finest drug stores in the city of Washington, D. C. The location is at the

corner of Connecticut and Florida Avenues, right in the heart of the diplomatic and aristocratic district. One of the marked features of Mr. Ridgway's store is his soda department. The fountain is one of great beauty

and is liberally patronized. Recently Mr. Ridgway got out a menu card which seems to us uncommonly artistic. In the accompanying engravings we are striving to show both the front and back of the card, although the half-tones entirely fail to do the menu adequate justice. We may add as a matter of possible interest that the Ridgway Pharmacy requires the constant services of eighteen people, so that it may be seen that Mr. Ridgway enjoys a very nice business.

It's Pretty Good, Whosesoever It Is!—

The window display of perfumery shown in the accompanying illustration came into the BULLETIN office some months ago. We regret to say, however, that the name of the sender became lost somewhere in the shuffle. We had a half-tone made, and then began a



systematic search for a letter which might possibly have accompanied the picture in the first place. Nothing could be found. Anyway the window display is pretty good, and we are publishing it finally for the benefit of our readers in general. If anybody wants to acknowledge authorship, we shall be glad to hear from him and to give him proper credit in a subsequent issue of the journal. We are anxious to "render unto Cæsar the things that are Cæsar's."

Mr. Bodemann's Pungent Paper.—

"Don't be afraid of your shadow," was the caption of an interesting paper by Wilhelm Bodemann before the Commercial Section of the A. Ph. A. at the Denver meeting in August. "This fear of maintaining good prices is a false habit. For years I sold a certain talcum powder at 25 cents. In our neighborhood we had agreed on this price. Finally I learned some were cutting the price, so I let it go at 15 cents.

"Now, harken! Did that increase the sales? Not by any means. It rather scared the people. They feared the quality had been lowered.

"For years we peddled almanacs, tolerated the patent medicine evil, gave telephone service free. We were afraid of our shadows. But we picked ourselves up and found that our patrons thought more of us. Let the druggist of America act as a man with backbone and he will be treated as such. People do not admire molly-coddles!

"Make up your minds on what you consider the right course, and then go to it! Hit the line hard! Everything else has gone up—help, meat, groceries, clothes, and it makes one disgusted to see our people act so cowardly as to be afraid to keep pace with the times. We have to pay laborers twice as much as we used to. We should be better compensated, but are not because—well, because, as I started out to say, we are afraid of our shadow!"

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Telepathic Tablets.—

German chemists find that yeast will assimilate small quantities of alcohol, and the growth is stimulated thereby.

F. Dossin says that therapeutically sodium nitrite is more useful than nitroglycerin because it is less toxic and its action less fugitive.

For the internal administration of radium emanations, drinking water is found to produce more lasting effects than breathing the emanations.

A French patent has been granted for the production of diamonds by exposing carbon to ultraviolet light at a suitable temperature.

German chemists think that microörganisms, perhaps bacteria, played an important part in the formation of clay.

For silver-coating, a mixture of equal parts of silver chloride, cream of tartar, sodium chloride, and alum is rubbed on to a metallic surface with a little water. The silver is reduced and adheres.

For gold-coating, 3.5 grammes of gold is dissolved in nitrohydrochloric acid, 1 gramme potassium nitrate and 3.5 grammes ammonium chloride added, and the whole is evaporated to half its volume. Then 200 Cc. of water are added, the linen rags dipped into the solution and then dried. The rags are then saturated with alcohol and burned, and the ashes used for the plating-polish.

Experiments on the souring of milk by several chemists point to the idea that the organisms which cause the souring are not normally constituents of the milk, but are probably derived from the intestinal tract.

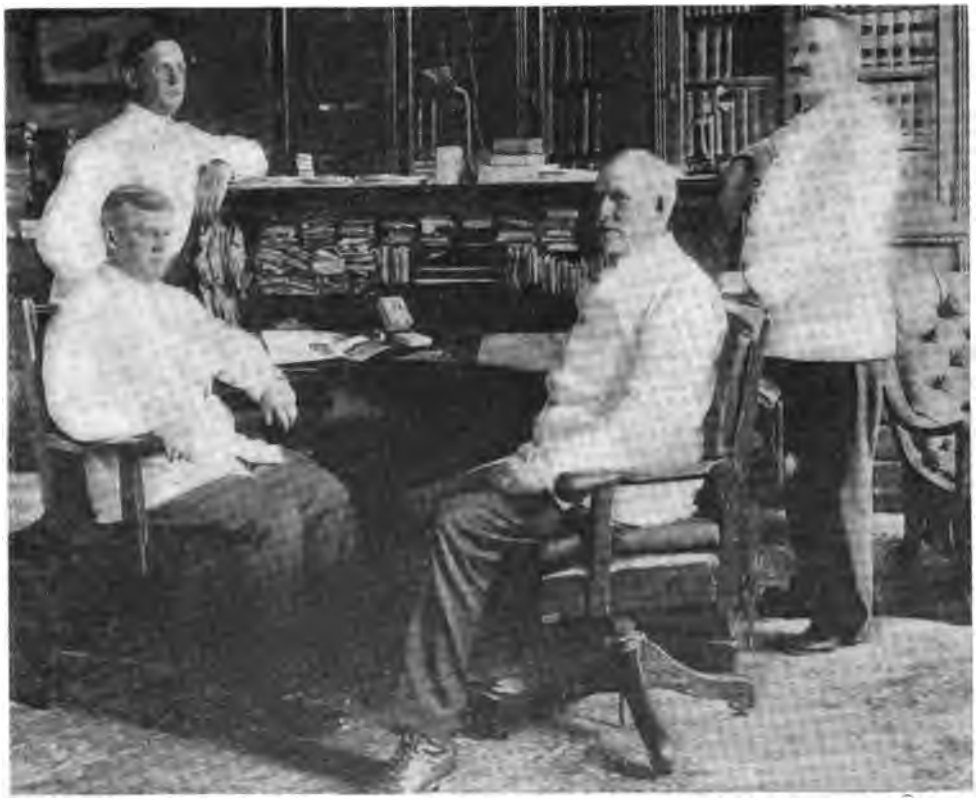
W. Volz proposes that horses be fed on yeast residues in place of a portion of their grain. He claims good nutritive value, no ill effects, and a considerable saving in cost. A frisky idea, surely!

The manufacture of kelp products is likely to be revived on the coasts of Ireland and Scotland. Improved methods make the combined products—ammonia, acetic acid, iodides, potassium, and charcoal—profitable.

Plants now in operation or being built for the utilization of atmospheric nitrogen have a capacity of over 250,000 tons of calcium cyanamide per year, and will probably be doubled within five years.

A factory is being erected in Holland for the manufacture of artificial rubber from fresh sea fish. It is calculated that fish-rubber can be made at a cost about one-sixth that of real rubber.

The Australian government has purchased the pitch-



THEY HOBNOB WITH CONVICTS!—These distinguished looking gentlemen represent the medical staff of Clinton prison in Dannemora, N. Y. The chief, Dr. Julius B. Ransom, sits in the chair at the right. Dr. Walter N. Thayer, the assistant physician, stands at the left. Seated opposite Dr. Ransom is Robert A. Sloss, pharmacist of the institution, and a graduate of the Albany College of Pharmacy, class of 1894. The rotund figure at the right belongs to J. B. Severance, the head nurse. Clinton prison, located up in the Adirondack region, is famous for its tuberculosis hospital. All the convicts in New York State affected with tuberculosis are transferred to this one prison, and the work done there in this direction has brought the institution to the favorable notice of physicians all over the country.

blende mines at Joachimsthal for about $470,000. It is estimated that 45 grains of radium per year can be extracted from the mines.

Dr. Umney says that volatile oils dissolve from 0.17 per cent (sandalwood oil) to 1.13 per cent (geranium oil) of their weight of water. Most oils will hold approximately 0.5 per cent, except those which are rich in terpenes, which no not take up water to an appreciable extent.

Extract of Gentian.—

Mr. Bridel found that in extracting gentian root with water he obtained 46 per cent of extractive, but only 15 per cent of the amount of gentiopicrin that was in the root. When 60 per cent alcohol was used on the same root, he obtained 52.5 per cent of extractive, containing 85 per cent of the total amount of gentiopicrin contained in the drug. He found that the alcoholic extract not only was richer, but contained more of the sugars of the natural drug than did the aqueous extract. He considers the alcoholic extract much more desirable.

Nature's Legacies.—

E. Ramann finds that as leaves wither before dropping in the fall, a considerable portion of the protein returns to the trunk of the tree, and also most of the potash and phosphates. The return takes place in a short time, and serves to nourish and strengthen the trunk. When leaves are killed by frost, the salts return to the trunk, but the protein does not, hence a frost when the leaves are green means a considerable loss to the tree.

What is a Poison?—

Experiments upon plants have shown that substances which act as poisons to the plants will in very small doses stimulate their growth. This is held to corroborate the law that materials which are poisonous to life in large doses act as stimulants in small doses.

BOOKS

OUTLINES OF BOTANY, MICROSCOPY AND PHARMACOGNOSY.

Dr. Henry Kraemer, of the Philadelphia College of Pharmacy, has published an outline of his courses in botany and pharmacognosy. The first year's work is devoted to botany. Leaves and roots, fruit and seed are studied morphologically.

The second year is given over to the pharmacognosy of the pharmacopœial drugs. Dr. Kraemer aims to acquaint the student with the physical characteristics of drugs to aid in their identification. The third year's work is devoted to the pharmacognosy of important unofficial drugs and those of the National Formulary.

This is something of a departure from the usual plan in pharmacy schools where official and non-official drugs are studied together. But the author states that any instructor who wishes may consider non-official drugs along with those outlined in the second year. His own purpose for separating the two is to concentrate attention on the drugs of the U. S. Pharmacopœia because of their greater importance.

This little work should prove useful in other colleges. Our readers may be interested to know that it contains review and examination questions covering nearly the entire subjects of botany and pharmacognosy. Dr. Kraemer's "Outlines" are printed by J. B. Lippincott Company, of Philadelphia.

SIMON AND BASE'S MANUAL OF CHEMISTRY.

The tenth edition of this valuable work is now off the press. The new revision makes its appearance at an opportune time. Students are about to begin their academic year, and physicians, pharmacists, and chemists are preparing for their winter's work. The Manual still preserves the characteristics which have won for it its present popularity.

Starting with several paragraphs on elementary chemistry, the authors proceed to a discussion of qualitative analyses for the detection of different metals and acid radicals. Methods for quantitative determination are also given. The last three hundred pages are devoted to a consideration of organic chemistry. Here the carbon compounds and their halogen derivatives are described. The section on physiological chemistry has been rewritten and brought in line with present-day knowledge and theories. Special care has been taken to introduce into the new edition the most modern methods for chemical examination and clinical diagnosis.

To physicians and pharmacists we can recommend Simon and Base's Manual of Chemistry as a useful and valuable work. There are 774 pages with 82 engravings and 9 colored plates. The publishers are Lea & Febiger of Philadelphia and New York. The price is $3.00, net, in cloth.

A CRITICAL REVISION OF THE GENUS EUCALYPTUS.

This is by J. H. Maiden, F.L.S., Government Botanist of New South Wales. Parts XIII, XIV, and XV, at two shillings and sixpence each, are at hand. The fifteenth part of this work has now been published. The first part appeared in 1903 and dealt with *Eucalyptus pilularis;* the subsequent numbers, including the numbers here considered, have brought the number of species treated up to 75, ending with *E. falcata,* sixteen being described in the last three numbers and illustrated with 12 plates. One new species, *E. Gillii,* is described from the dry sections of the southern parts of Australia. The painstaking care and exhaustive treatment of the subject reflect great credit upon the author, and set a standard for research work to which monographers in general may well give careful consideration.

THE SPATULA INK FORMULARY.

A rather unusual book is "The Spatula Ink Formulary," composed of recipes and directions for making writing fluid of all kinds. The author is Dr. J. H. Oyster. He prefaces the work with the statement that he has been collecting ink formulas for thirty-five years with a view to publishing them in book form. Practically all known recipes for inks can be found in this volume. It is published by the Spatula Publishing Company of Boston. There are 172 pages bound in cloth. The price is $2.00 post-paid.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

A Difficulty Over Menthol.

A. L. G. asks: "How would you compound the following prescription so that the menthol will stay in solution?

Listerine	1 drachm.
Glycerin	1 drachm.
Carbolic acid	4 minims.
Menthol	5 grains.
Cocaine muriate	20 grains.
Aqua, q. s. ad	2 ounces.

"The doctor who writes this prescription says that a certain druggist puts it up so that there is no precipitate. But every method that I have used results in a precipitate on standing."

The menthol is insoluble in the mixture. Call the physician's attention to that fact.

There are three ways of overcoming the difficulty, viz.: Add a sufficient quantity of alcohol to dissolve the menthol; reduce the amount of menthol; or filter off the excess. Most likely the customer's competitor used the latter method. We should suggest the following method for compounding if the physician will not consent to adding a sufficient quantity of alcohol to retain the menthol in solution: Triturate the menthol and phenol until liquefied. Add 30 grains of purified talc and triturate well. Add gradually the listerine, glycerin, and 14 drachms of distilled water in which the cocaine muriate has previously been dissolved. Filter through paper. A bright, clear solution will result.

Why the Mucilage Won't Come Off.

E. O. S.—On page 396 in this department of the September BULLETIN a querist expressed his inability to remove mucilage from a plate-glass window. He had tried every kind of solvent, but the adhesive simply would not come off.

Fred P. Shanafelt, of Canton, Ohio, now comes forth with an ingenious explanation: That the mucilage was composed of sodium silicate, which solidified and is now part of the glass itself. If this be true, the mucilage is certainly there to stay!

If glue has simply dried upon the glass, hot water ought to remove it. If, however, the spots are due to "size" (the gelatinous wash used by painters) they become very refractory when dried, and recourse must be had to chemical means for their removal. The commonest "size" being a soluble gelatin, alum, and resin, dissolved in a solution of soda and combined with starch, hot solutions of caustic soda or potash may be used. If that fails to remove them, try diluted hydrochloric, sulphuric, or any of the stronger acids. If the spots still remain some abrasive powder (flour of emery) must be used and the glass repolished with jewelers' rouge applied by means of a chamois skin. Owing to the varied nature of "sizes" used the foregoing methods are offered merely as suggestions.

Heroin and Terpin Hydrate Preparations.

J. L. B. wants a working formula for elixir of heroin and terpin hydrate, elixir of heroin, and syrup of codeine compound.

Elixir of heroin and terpin hydrate will be found on page 43 of the National Formulary. It is made as follows:

Heroin	11 grains.
Elixir of terpin hydrate	32 fluidounces.

Dissolve the heroin in the elixir.

4 Cc. (1 teaspoonful) contains 0.065 gramme (1 grain) of terpin hydrate, and 0.0027 gramme (1/24 grain) of heroin.

The formula for elixir of terpin hydrate used in the foregoing mixture appears on page 42 of the National Formulary:

Codeine	32 grains.
Elixir of terpin hydrate (N. F.)	32 fluidounces.

Dissolve the codeine in the elixir, by trituration.

4 Cc. (1 teaspoonful) contains 0.065 gramme (1 grain) of terpin hydrate and 0.0084 gramme (⅛ grain) of codeine.

To prepare an elixir of heroin add one grain of heroin to each ounce of aromatic elixir, U. S. P.

Syrup of codeine compound may be made by dissolving 1/6 grain of codeine phosphate; ¾ grain of terpin hydrate; ½ grain of eucalyptus extract, and ¼ grain of ipecac to the drachm, in a vehicle containing a little sugar.

Keeping Drugs Free from Insects.

J. K. writes: "Will be glad to have you reply to the following inquiry: How can I keep insects from getting into my stock powder? It contains nux vomica, bloodroot, fenugreek, saltpeter, sulphur, and cottonseed meal."

If you will consult our book "350 Dollar Ideas for Druggists," you will find a method of protecting drugs from insects. It appears on page 22 and was contributed by Murphy Williams of Corsicana, Texas. To quote:

"I have been worried for years trying to keep insects out of certain drugs. Some months ago I tried the following scheme with good results: Once a month, regularly, pour a few drops of chloroform into each container of crude drugs. This procedure is inexpensive and kills the insects without injuring the goods. Among the herbs which receive this treatment are capsicum, black pepper, mustard, powdered sage, flaxseed, ground flaxseed, quince seed, celery seed, coriander seed, powdered ginger, powdered nux vomica, aniseed, caraway seed, powdered orris, powdered rhubarb, rhubarb fingers, and fenugreek. I always make a note on my calendar, and do the chloroforming regularly on the 15th of each month. Thus I am sure of never forgetting it."

Hectograph Pads.

F. N.—A hectograph is essentially a mixture of glue (gelatin) and glycerin. It may be made by melting together 1 part of glue, 2 parts of water, and 4 parts of glycerin (all by weight, of course), evaporating some of the water and tempering the mixture with more glue or glycerin if the season or climate require. The mass when of proper consistency, which can be ascertained by cooling a small portion, is poured into a shallow pan and allowed to set. Clean glue must be used or the mixture strained; and air bubbles should be removed by skimming the surface with a piece of cardboard or similar appliance.

Variations of this formula have been proposed, some of which are:

(1)	Glycerin	12 ounces.
	Gelatin	2 ounces.
	Water	7½ ounces.
	Sugar	2 ounces.
(2)	Water	10 ounces.
	Dextrin	1½ ounces.
	Sugar	2 ounces.
	Gelatin	15 ounces.
	Glycerin	15 ounces.
	Zinc oxide	1½ ounces.
(3)	Gelatin	10 ounces.
	Water	40 ounces.
	Glycerin	120 ounces.
	Barium sulphate	8 ounces.

Compound Tincture of Vanillin.

W. R. W. writes: "Will you please publish a formula for a flavoring agent made from vanillin and cumarin for bakers' use, to have about the same flavoring capacity as vanilla extract?"

Try compound tincture of vanillin. It appears on page 187 of the National Formulary:

Vanillin	90 grains.
Cumarin	6 grains.
Alcohol	6 fluidounces.
Glycerin	4 fluidounces.
Syrup (U. S. P.)	4 fluidounces.
Compound tincture of cudbear (N.F.)	½ fluidounce.
Water, a sufficient quantity to make	32 fluidounces.

Dissolve the vanillin and cumarin in the alcohol, add the glycerin, syrup, and compound tincture of cudbear, and lastly enough water to make 1000 Cc. or 32 fluidounces.

Cider Preservatives.

C. F. S.—You had better look carefully into the pure food and drug laws before selling preserved cider. For your personal use, we offer the following formulas borrowed from the literature:

1. The addition of 154 grains of bismuth subnitrate to 22 gallons of cider prevents, or materially retards, the hardening of the beverage on exposure to air; moreover, the bismuth salt renders alcoholic fermentation more complete.

2. Calcium sulphite (sulphite of lime) is largely used to prevent fermentation in cider. About ⅛ to ¼ of an ounce of the sulphite is required for 1 gallon of cider. It should first be dissolved in a small quantity of cider, then added to the bulk, and the whole agitated until thoroughly mixed. The barrel should then be bunged and allowed to stand for several days, until the action of the sulphite is exerted. It will preserve the sweetness of cider perfectly, but care should be taken not to add too much, as that would impart a slight sulphurous taste.

Liniment.

Detroiter writes: "Kindly publish a formula for a liniment containing safrol, oil of tar, oil of mustard, light oil of pine, oil of wintergreen, chloroform (commercial), and capsicum. What would you use as a base and in what proportion would you use it? Please state the percentage of chloroform and the base if it be of an alcoholic nature."

We suggest the following formula:

Oleoresin of capsicum	2 Cc.
Oil of sassafras, artificial	6 Cc.
Oil of tar	12 Cc.
Oil of mustard	1 Cc.
Oil of pine needles *(Abies Siberica)* or oil of turpentine	15 Cc.
Methyl salicylate	20 Cc.
Chloroform, commercial	24 Cc.
Petrolatum liquidum or alcohol	q. s. ad 120 Cc.

This contains chloroform 20 per cent, and, if alcoholic, 33⅓ per cent, of 95-per-cent alcohol.

Ice Plant.

D. C. A. writes: "Can you tell me anything as to the physiological action of ice plant *(Monotrobia Uniflora)*? The common names are ice plant and Indian pipe plant. Do you know whether or not it is habit-forming, like opium?"

The principal constituent of this drug is andromedotoxin, a poisonous alkaloid, although the plant is not classed as a poisonous one. It is not at all likely that the plant is habit-forming. It is a stimulant tonic, diuretic, and nervine. It has been used in epilepsy, nervous irritability, and similar ailments as a nerve sedative, and in this respect may be similar to opium.

To Remove Iron Stains.

J. E. T. writes: "Can you tell me the formula of a light, creamy paste that will remove iron rust from cotton and linen goods? I know that the oxalates and tin chloride are good. How can they be made into a paste that may be put into collapsible tubes?"

Suppose you use cream of tartar and oxalic acid. Make them into a paste with glycerin and a little water. Be careful about using the mixture on colored goods, because there is danger of removing the dye.

A Germicide.

C. P. H. & S.—We do not know the composition of the proprietary germicide which you mention. Perhaps liquor antigerminarus N. F. will serve your purpose. The formula reads:

Thymol	240 grains.
Oil of eucalyptus	2 fluidounces.
Oil of lavender	2 fluidounces.
Alcohol	25½ fluidounces.
Water, enough to make	32 fluidounces.

Dissolve the thymol and oils in the alcohol, add enough water to make 32 fluidounces, and filter if necessary.

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THE

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THE MONTH'S HISTORY

PROSPERITY!

Every indication points to a rising tide of prosperity, and there is no reason on earth why the drug trade shouldn't get its share. The crops this year are astonishingly good. The corn crop was larger than it had been for six or seven years; the hay crop was considerably better than the ten-year average; the oat crop exceeded all precedent; and the good cotton crop leaves nothing to be desired. Turning to the steel and iron industry, which is always an excellent barometer, we find the United States Steel Corporation reporting unfilled orders larger in amount than for five years past. Meanwhile the increase in railroad traffic is so tremendous that the problem presented by a shortage of cars is becoming most urgent.

Everywhere business men are exhibiting greater confidence than they have for some years. With almost entire accord, the country is looking forward to an era of expansion and development. This is all the more astonishing during such a presidential campaign as we have just witnessed, and in the face of direful prophesies of what might happen if this party or that were chosen to conduct the affairs of government. "Big business," in accordance with its shrewd practice, had discounted the results of the election, and had foreseen Mr. Wilson's triumph. If, realizing the inevitable, it continued to foster growth and confidence, it must have had no fear of any "Democratic panic." Since the election everything seems to point as before to continued expansion, and even Mr. Wilson's announcement of the revision of the tariff downward at a special session of Congress next spring has caused no let-up in the onward movement.

Let us therefore all get ready for prosperity—and let us profit by it like good business men. All this talk about a panic is childish—that is, it is childish except that if we talk long enough about a thing, and fear it enough, and continue systematically to expect it, we shall most assuredly bring it to pass.

* * *

ARRESTED FOR SELLING ABORTIFACIENTS.

The sensation of last month was the simultaneous arrest in different cities throughout the country of 173 persons for misuse of the mails either in soliciting criminal medical practice, or of disposing of drugs and instruments intended for criminal purposes. The newspapers have been full of it, and our readers are doubtless well informed of the situation. It may be said, however, that the arrests were made under Section 211 of the United States Penal Code, which bars from the mails any advertisement, letter or circular proposing or suggesting criminal practices, or any package containing any drug, instrument or substance to be used for immoral or unlawful purposes.

Presumably the offense involved in most of

the 173 cases was that of sending abortifacients through the mails or of soliciting orders for them. Among the defendants are retail and wholesale druggists, physicians, and other persons who stand so well in their communities as in some instances to be church elders and Sunday-school superintendents. It is a very pretty mess from beginning to end, and some heavy penalties will doubtless be imposed.

The situation is confessedly unfortunate, but it will serve the useful purpose of teaching every druggist and every doctor that the mails may not be used for the solicitation of such business, or for the distribution of such remedies. Furthermore, practically every State absolutely forbids the sale and use of abortifacients as such. More than that, nearly every State pharmacy act or poison law prohibits the sale of well-known emmenagogues like ergot, cottonroot, oil of tansy and oil of pennyroyal unless they are plainly labeled "poison," unless the sales are registered, and unless it is known by the druggist that the substances are to be used for legitimate purposes and not to produce abortion.

* * *

THE REFERENDUM IN CALIFORNIA.

These are the days of the referendum in politics. "Give the people a voice" is one of the shibboleths of recent years. In pharmaceutical circles, as we pointed out two or three months ago, the graduation prerequisite idea has been submitted to the vote of the pharmacists of several States during the last two or three years. We now find that the California State Pharmaceutical Association has gone a step farther, and has put it up to its entire membership to decide by mail on the pros and cons of a considerable number of proposed amendments to the pharmacy laws of the State.

It would seem that the members of the association have been more or less at loggerheads for several years over the wisdom of making certain amendments. Two or more factions have meanwhile developed, and a good deal of bitterness has resulted. It was a very happy stroke when, at the last annual meeting of the association, it was decided to submit the whole question in detail to the entire membership by mail, and then to abide by the results. Accordingly a voting sheet has been sent out on which 12 questions are printed, and druggists are asked to vote yes or no on every proposition. These questions cover such topics as the graduation prerequisite, the enforcement of the pure drugs law by the State Board of Health, the amendment of the poison law, whether the Board of Pharmacy shall comprise five or seven members, etc., etc.

* * *

WHY NOT TRY IT ELSEWHERE?

This whole plan strikes us as being admirable, if only the results are honestly and faithfully abided by. There ought to be no looking behind the returns. Inasmuch as the whole thing is put up to a popular vote, the results of this popular vote should be considered mandatory instructions, and all factional fighting should be abandoned. It might not be a bad idea to try out this referendum scheme in States like Pennsylvania. There, as our readers know, strong differences of opinion have developed during the last few years over proposed amendments to the poison and antinarcotic laws. Finally, after a good deal of debate, these differences were apparently ironed out by definite vote at the last annual meeting of the State association.

But what do we find? Is there harmony as a result of the vote, and has the minority decided to abide by the results? No! We have been hearing of dissatisfaction ever since from different individuals and different groups in the State. The Philadelphia Association of Retail Druggists, for instance, either has held a meeting or soon will hold one, to protest formally against the decisions reached by the State association, and to outline what sort of amendments it will stand for. Presumably it will send representatives to the State legislature to appear against the representatives sent by the State association. Now why wouldn't it be a good scheme to do in Pennsylvania what is being done in California—submit the whole thing to a State-wide vote, find out what druggists want, and then go ahead and get it?

The majority ought to rule in this country. This is one of the fundamental rules of our system of government. The difficulty is that it is often impossible to know where the majority stands, and the referendum idea furnishes a pretty good method of getting at the facts. It has been used, as we have already reported, with a good deal of success in dis-

covering what the sentiment is about the graduation prerequisite. Why not go farther with it?

* * *

ANTI-NARCOTIC REFORM.

There has fortunately been a good deal of activity lately in the direction of anti-narcotic reform. In Alabama the Board of Pharmacy has begun an active campaign against violators of the State law. The license of one pharmacist has been revoked; six or seven other druggists are under investigation; and it is expected to keep the work up systematically. The board is endeavoring to induce State officials to create a fund for the purpose.

In Brooklyn a grand jury has begun an investigation. In one week about 17 witnesses from wholesale drug firms were examined, the idea being to find out who were the large purchasers of narcotics in Brooklyn. The District Attorney has followed up the leads energetically. One offender has been sentenced to five years' imprisonment on the second offense for the attempted sale of cocaine. A second man, who is a druggist by the way, is being held in $3500 bail on two charges, and his brother, a dentist, in $2000 bail on one charge. Other early arrests are probable.

The District Attorney of Kings county has characterized the spread of the drug habit as one of the worst evils Brooklyn has ever had to contend with, and he has declared that the work of investigation and prosecution would be continued until every illicit trafficker had been driven to cover.

* * *

DRUG-STORE COMBINATIONS.

Drug-store combinations seem to be growing apace. The group of Liggett stores throughout the country owned by the Louis K. Liggett Co. will henceforth be known under the title of "Liggett's." These stores, as everybody knows, are a sort of offshoot of the United Drug Co., manufacturers of Rexall preparations. They now total 51 in number, and plans are under way for the opening of five additional stores in Greater Boston. At the present time the Liggett establishments are located in Boston, Buffalo, Baltimore, Brockton, Columbus, Detroit, Haverhill, Lawrence, Lowell, New York, Newport, Paterson, Pawtucket, Providence, Salem, Syracuse, Toronto, Troy, Woonsocket, and Worcester.

On a recent occasion all 51 of the Liggett stores printed large advertisements in the local newspapers, offering bargains in every department. In the New York store, at the corner of Broadway and 34th Street, the total business of the day was said to have exceeded $10,000, while the total of all the 51 stores in the group was 60 per cent greater than any previous day's business had been in the history of the company.

Now we find that Baltimore has a new drug-store combination. It is being promoted by M. M. Whitehurst, John W. Gregory and H. Hechheimer. The business will be known as the Associated Drug Stores. It has recently been incorporated under the laws of New Jersey and has a capital stock of $45,000. So far the company has three stores, and it has declared its intention of acquiring other stands in Baltimore, and also of developing a chain of stores in Richmond, Va., Norfolk, Va., and other near-by towns. S. A. Nattans, a son of the late Arthur Nattans, head of the Read Drug and Chemical Co. at the time of his death, is general manager of the corporation.

* * *

FLORENCE YAPLE.

Miss Florence Yaple, who died some weeks ago, was probably not very well known to the pharmacists of the country, but this was largely because of her excessive modesty. For years she more or less regularly attended the annual meetings of the American Pharmaceutical Association to report the conventions for the *American Journal of Pharmacy*. Those of us who represented the pharmaceutical press got to know and to admire her, but doubtless the general membership was less fortunate. Graduating from the Philadelphia College of Pharmacy in 1895, she subsequently served as research assistant to Professor Trimble, and afterwards to Professor Kraemer. She likewise helped both men in the editorial and business conduct of the *American Journal of Pharmacy*. Working much of the time in the *Journal* office in the college building, she was frequently consulted by students for information of one kind and another, and she was always willing to be of service. She was a fine scholar, in pharmacy as well as out of it, was a faithful and earnest worker, and will be sincerely missed by those with whom she came intimately in contact.

PERMANENT HOME FOR THE A. PH. A.?

James H. Beal, that quiet, serene, constructive thinker, has started the development of a new idea. In an editorial in the November issue of the *Journal of the A. Ph. A.* he argues very convincingly that the Association ought to have a permanent home. It should have a place for the preservation of its archives and its growing historical collection; it should have room to accumulate a library instead of continuing to dissipate it for lack of space; "it should have at its command suitable laboratories where the formulas proposed for inclusion in the N. F. could be tested out;" and it should have a definite headquarters where its editorial and clerical staff could be housed, and where its business could be transacted. Dr. Beal says that such a building, at a rough guess, could be erected for $50,000. It could easily be maintained from the rapidly increasing revenues of the Association, but the first cost would have to be met otherwise, "and since the A. Ph. A. has given its services freely to the whole of American pharmacy, why should not the whole of American pharmacy contribute to a plant which would enable the Association to greatly increase its usefulness to the cause which it represents?"

* * *

THE PARCELS POST.

It isn't perfectly clear that the parcels post is going to mean such a great reduction after all—as compared, we mean, with express rates. We find in a recent issue of the *Western Druggist* an interesting comparison originally compiled by the Chicago Association of Commerce. The proposed reduction in express rates will of course make quite a difference, and when the new rates are compared with the parcels post figures it is discovered that the latter has the best of it only for short distances, and for packages less than four pounds in weight. When you get up above four pounds, and particularly when you send a package a considerable distance, it is cheaper to use the express company. On a short haul, within the 50-mile zone, for instance, the parcels post is cheaper until you reach the weight of seven pounds: on a longer haul, such as 600 miles, the parcels post is cheaper only up to four pounds; and when the distance of 1000 miles is reached, the parcels post ceases to be cheaper at a limit of three pounds. Beyond these limits the express companies, under the proposed rates, will have much the best of it.

* * *

WORTH DUPLICATION.

A feature was inaugurated at the last annual meeting of the Iowa State Pharmaceutical Association which is well worthy of duplication elsewhere. It was called an educational session, if we remember correctly, but while it certainly was educational, it was not that in the customary meaning of the word. It was a session where every druggist who had made a pronounced success of some particular department in his store was asked to tell how he had turned the trick, and his remarks were then discussed. As a result, brief five- and ten-minute talks were given by prominent druggists from different parts of the State, and the whole idea turned out to be such a success that it will be made the leading feature of the convention next year.

* * *

Dr. George D. Rosengarten, vice-president of the Powers-Weightman-Rosengarten Co., has been seriously ill with typhoid fever in the German Hospital at San Francisco, but is now reported as well or nearly well. He traveled West with a hundred or more members of the International Congress of Applied Chemistry, on a tour of investigation following the New York meeting last October, and apparently was taken ill while on that trip.

* * *

The Executive Committee of the Illinois Pharmaceutical Association, at its midwinter meeting held last month in Chicago, adopted a resolution asking the trustees of the University of Illinois to include in their legislative requests this year the sum of $200,000 for the purchase of a site and the erection and equipment of a building for the School of Pharmacy.

* * *

The city of Columbus, which has for some time enjoyed the distinction of being one of the best price-protected cities of any size in the entire country, now threatens to indulge in a fierce saturnalia of cut rates. The moon looks angry.

EDITORIAL

SHOULD THE DRUGGIST MAKE HIS OWN GALENICALS?

The question propounded in the caption of this editorial was discussed in very animated fashion at the Denver meeting of the American Pharmaceutical Association last August. F. W. Nitardy, who has been and perhaps now is connected with the food and drug authorities in Colorado, argued very strenuously that the druggist should be his own manufacturer. He gave figures showing the difference between the cost of galenicals when manufactured by the druggist on the one hand, and when purchased by him on the other. The saving was represented to be quite considerable, and after Mr. Nitardy had finished his demonstration he was earnestly supported by Dr. W. C. Anderson. Others, too, discussed the question.

Now witness a strange development: a teacher of pharmacy immediately took the other side of the question! Prof. H. C. Washburn, dean of the Denver College of Pharmacy, held that for more reasons than one it was uneconomic and contrary to his own best interests for the druggist to make many of his tinctures, fluidextracts, elixirs, and the like. His position was that a large manufacturer, well provided with the latest and best equipment, and having at his command the service of experts in every line, could secure better crude drugs, could make preparations of more uniform potency, could assay and standardize them with greater skill and accuracy, and, everything considered, could sell his products to the druggist at a lower figure than the druggist could make them for himself. It was to be gathered from his remarks that he believed manufacturing pharmacy to be one of the marked developments of the time, and that to reject it was to turn one's back on progress, advancement, and economic advantage.

As for ourselves we have no desire to argue very positively on one side or the other of this proposition. Practically all of the pharmaceutical schools and colleges urge their students very earnestly to make their own galenicals. Some of the pharmacists of the older school—"apothecaries," as they used to be called—give the same counsel. Perhaps they are right. In any event the individual pharmacist will follow his own inclination and training, and if he likes the work of manufacturing, and has been taught to do it well, will continue to practice it. The great majority of druggists will probably not be influenced very much one way or another by arguments for or against the manufacture of galenicals in the store. There are, however, a few considerations which are frequently overlooked. Those who advocate that the druggist should be his own manufacturer usually declare that it would save him a lot of money. This was practically Mr. Nitardy's chief argument, and it is the chief argument also of most others. Is it based on fact? We do not think it is.

Recently, for instance, the chief chemist of one of the leading houses in the manufacturing trade told the editor of the BULLETIN that every drug assay made in duplicate in his laboratory cost the house $4.60! This seems astonishingly high, and it even surprised the house itself when it uncovered the facts, but thorough investigation showed beyond peradventure that the figure was correct. Now if it costs a manufacturer $4.60 to make an assay of a tincture or a fluidextract, it would cost the retailer much more than this when he figured in the cost of his time and material. He is not anything like so well equipped to do the work, and the expense would surely be greater in his case. Furthermore, the cost to the manufacturer of assaying a single lot of fluid is spread over four or five hundred gallons of product, and it therefore becomes a very small charge against a single pint. But what about the druggist who makes a pint, a quart, or at most a gallon at a time, and who must suffer this heavy expense on so small an output?

Again, the manufacturer not only examines and standardizes his finished product, but he likewise tests every salt and assays every acid entering into the preparation of his elixirs and other galenicals. The whole process of manufacture is checked up at every stage in order that results of the most positive accuracy, and products of the greatest efficiency, may be secured. It is relatively easy for him to do all this in making immense quantities of his preparations, but is it practicable and feasible for the retailer to do it? And if the retailer does do it, isn't the expense going to double, treble, or even quadruple the cost of his finished preparations? All this work must be done,

mind you, if galenicals are going to be what they ought to be, and if the retailer is going to turn out products equal to those made by the manufacturer, demanded by the standards of the time, and conforming to all the requirements of the food and drug laws. A fluid extract, for instance, cannot be dismissed after a single assay has been made. The work must be done in duplicate, and the assay repeated after the adjustment to standard strength has been made to see that proper results have actually been secured.

We do not know what method Mr. Nitardy followed in arriving at his comparative figures, but we have observed that other druggists in the past, in arriving at the cost of manufacturing galenicals versus the cost of buying them, have failed to include the element of the druggist's own time. This of course is a fatal defect in all such calculations. If the druggist is going to make everything himself, and is going to make everything right, he will find that the entire time of himself or of some well-trained man will easily be consumed. The cost of this man must therefore be charged up against the cost of the products, and not only the cost of the man, but the cost of the galenical product consumed, the expense for equipment, and the loss of alcohol and such assay materials as ether, chloroform, and the like. There has been a lot of deception about all these factors, and amateur accountants have greatly deceived themselves and their hearers. For years the BULLETIN has argued that the druggist should know what he was about in the calculation of costs, and here is another field where the same truth applies in direct measure.

Some druggists, realizing all these considerations more or less vaguely, have sought to beat the devil round the stump. Thus a resolution was introduced at the Milwaukee meeting of the N. A. R. D. which urged the druggist to make his tinctures from assayed crude drugs. The advocates of this resolution evidently felt that it was not practicable for the average retailer to assay his finished products. They felt, too, that the good old slipshod method of making galenicals and trusting to luck that they would be efficient, and uniformly efficient, wouldn't do any longer. Some assurance of proper results must be given, and so they fell back upon the idea of starting with assayed crude drugs, purchased ready prepared for the purpose.

Now we have nothing to say against assayed crude drugs, but it has been found over and over again that, waiving the question of whether these drugs are or are not what they ought to be to start with, the preparations made from them have been far from uniform and satisfactory. The investigations made by several pharmaceutical chemists during the last few years have proved this beyond peradventure. Such a proposition, therefore, is a mere subterfuge, and we were glad to see that the resolution failed of adoption at the Milwaukee meeting, and was quietly put to sleep along with several other propositions of equal wisdom. The N. A. R. D. could not bring itself to sanction side-stepping of so obvious a character.

But, as we have already said, we do not mean to argue against the preparation of galenicals in the drug store. We have no doubt at all that in some instances they are made there with great fidelity. Our position is, however, that they ought not to be made in the store unless they are made with the same thoroughness and care with which they are produced by the reputable manufacturing pharmacist, and that when they are so prepared, they really cost the druggist more than he could buy them for. The claim of economy in this instance is mere sophistry. Furthermore, there is much in the argument that manufacturing pharmacy represents a specialized advance of the times; that the wise druggist should realize this to be the fact; that he should take advantage of the opportunity to relieve himself of the tedious detail of manufacturing work; and that he should utilize the time and the effort thus spared to him for the vigorous and energetic development of his business. An hour spent in the promotion of trade, and in the expansion of sales, is far more productive than an hour spent in the effort to realize an economy—particularly when the economy isn't realized after all.

HOW MANY OUNCES IN A POUND?

Suppose you were taking the examination of a State board for registration and the following questions were asked you: "How many ounces are there in a pound of glycerin, specific gravity 1.25?" "How many ounces in a pound of ether, specific gravity 0.762?" What would be your answer? Naturally, if one stopped to think and

caught the real meaning of the questions, the answers in both cases would be: "There are sixteen ounces in a pound, no matter what the specific gravity of the liquid may be." Yet out of some fifty odd candidates for registration in a near-by State over half of them gave answers varying according to the condidate's arithmetical skill, most of them basing their answers on a division of the number of ounces in a pound by the specific gravity of the liquid named.

On first thought such a question would be indignantly characterized as "one of the fool catch questions boards of examiners are so fond of asking;" on second thought it will be more or less grudgingly admitted that the question was given to test the intelligence of the candidates, not their skill in arithmetic. If a man is sure of his knowledge and himself such questions are easily answered, but if he is floundering in a maze of half-digested knowledge and has the common idea that pharmaceutical examining boards get their sole delight in puzzling candidates, he would at once seek for some hidden mystery in such a question and thereupon would proceed to work it out in the most complicated fashion. —*American Druggist.*

We beg leave to differ. To us these two questions *are* "catch questions," pure and simple. Not only are they catch questions: they are worse than that—they are stupidly misleading. We submit that, if honestly given, they can be interpreted in only one way, as if they read:

1. How many *fluid* ounces are there in a pound of glycerin, specific gravity 1.25?
2. How many *fluid* ounces in a pound of ether, specific gravity 0.762?

This, we repeat, is the plain meaning of the two questions, if honestly intended. Those who so considered them were correct, and we therefore hold that "over half of the candidates," instead of being in the wrong, were in the right. If the Board of Pharmacy in the "near-by State" penalized these candidates they certainly punished intelligence and accuracy, and to this extent made the examination a farce and a travesty.

Besides, *no question ought ever to be asked which can possibly be interpreted in two ways.* It isn't fair to the candidates. If there is ever a place where English of absolute accuracy and flawless clarity ought to be employed, it is in an examination paper.

WHY TAKE CHANCES?

Notwithstanding all that has been said and written on the subject, some druggists continue to take hazardous chances in business without protecting themselves fully against fire losses. Here is an actual letter written not long ago by a member of a retail drug firm to one of the firm's creditors:

GENTLEMEN:

We recently had the misfortune to lose our entire stock and fixtures by fire. We were only partially protected by insurance, the amount on the stock, etc., being $3500, but we had not taken inventory within twelve months, as is required by the insurance companies, and they penalized us 20 per cent, which left us $2800, and what collections we could make, to pay what we owed. We have about exhausted our collections, and secured $800, which makes $3600 altogether, and we owe (including $2000 borrowed from banks) $4000. This leaves us short, as you see, about $400, after losing every dollar we put into the business, which was $3000 in cash, $2000 of this being furnished by me, from which I never realized any profit but let it remain to increase the stock.

In consideration of these facts, I am asking you, and all of our creditors, to allow us a discount of 10 per cent and I will see that a check is mailed you upon receipt of your statement less 10 per cent. Please understand that we are not offering this as a compromise, but our concern was incorporated, and you see with this 10 per cent discount we shall be able to just about pay our debts.

Two shortcomings are indicated in this letter. In the first place no inventory had been taken during the last year, and presumably not for several years. A penalty of 20 per cent was imposed for this reason. In the second place, the amount of insurance protection was by far too small. It was so small, indeed, that the partners got absolutely nothing back for the money which they actually put into the business by way of capital. They lost every cent, and even at that didn't have enough to pay their creditors without asking for a 10-per-cent concession.

Why will druggists continue to take such foolish chances?

PROFITS AND EARNINGS

AN INTERESTING STATEMENT FROM CUBA.

One of the subscribers of the BULLETIN OF PHARMACY in Cuba has been interested in an address which was written by the editor of the BULLETIN, and which appeared on page 374 of the September issue. In that address a table was given presenting the epitomized business statements of 25 druggists throughout the country. Our Cuban subscriber was led to compile a statement of his own business, and

for his enlightenment he compared it with those of two other druggists taken from the table mentioned. He selected the particular statements of druggists D and E because their volume of business was just about like his. We now reproduce this comparative showing as our Cuban friend sends it to us:

	D.	E.	Ours.
Annual sales	$25,107 00	$23,823 00	$24,475 00
Cost of goods sold	12,336 00	16,496 00	14,672 00
Gross profits	12,771 00	7,327 00	9,803 00
Expenses	6,000 00	6,702 00	3,387 00
Net profits	6,771 00	625 00	6,415 00
Percentage gross profits (on sales)	51	31	40
Percentage expense	24	28	26
Total income (including proprietor's salary)	$7,670 00	$1,825 00	$9,416 00

Our Cuban correspondent writes as follows:

After a great deal of study of your interesting article in the September BULLETIN I arranged the enclosed schedule only to find that I am way off in having interpreted the "cost of goods sold" to mean the year's purchases. Won't you kindly advise me as to just what is the "cost of goods sold?" I can't seem to get this feature of the thing clear in my mind.

If my inventory a year ago had disclosed a showing of $20,000, and the inventory now should be $25,000, would this $25,000 be the cost of goods sold? And does the inventory include the fixtures account? I suppose these questions seem stupid to you, but they are very pertinent to me, and I should much appreciate your shedding the light of your skill on my statement.

So far as my figures are concerned, they are all accurate, except that I have taken no inventory. I believe, however, that my stock is far above what it was twelve months ago. My personal salary is $3000 a year, and I have taken from the business $1374 additional. According to my bank-book, I have in the meantime increased my deposits by $2000. Now with these facts will you tell me where I am at?

Our correspondent has made several mistakes. In the first place we may explain that the "cost of goods sold" is not the equivalent of the year's purchases. A man may purchase $20,000 worth of goods during the year, but only sell $15,000 of them. The remainder goes into the permanent stock and shows up in an increased inventory valuation. The goods actually sold, however, have cost only $15,000, and it is this amount, and not $20,000, which should be deducted from the total sales in order to arrive at the gross profits. Sometimes, on the other hand, one may sell more goods during the year than he buys, in which case the inventory valuation will show a slump instead of an increase, and the cost of goods sold will be greater than the purchases instead of less. Is this perfectly clear? It simply means that one can tell very little about the facts until he does take annual inventories, and until he knows what he has actually sold.

Now we have no means of knowing accurately what was the cost of the goods sold in this case. In the absence of inventories, we can only assume that the permanent stock remained the same, and that the cost of goods sold was fairly represented by the year's purchases. We then find gross profits of $9803, representing a percentage of 40. This is very satisfactory.

As soon as we get to the element of expense in the statement, however, we strike another mistake. Our correspondent has manifestly failed to include his own salary as proprietor in the expense account. This amounts to $3000, and we therefore have a total expense of $6387 instead of $3387. This one item alone changes the whole complexion of the table, and we venture now to print it in corrected form:

Annual sales	$24,475
Cost of goods sold	14,672
Gross profits	9,803
Expenses	6,387
Net profits	3,416
Percentage of gross profit (on sales)	40
Percentage of expense	26
Total income (including proprietor's salary)	$6,416

This cuts down our correspondent's showing somewhat, but even at that it is pretty good. A net profit of 14 per cent is not to be sneezed at! And a total income of $6416 is about as much as could be expected from a $25,000 business.

Finally, we may point out that, according to our revised schedule, net profits were realized of $3416. This amount of money should actually have accumulated, unless some of it went into an enlargement of the permanent stock. Now how much did accumulate? Well, we find that the proprietor drew out $1374 above his salary, and that his bank account increased also by $2000, making a total of $3374. This pretty nearly accounts theoretically for the net profits of $3416, which leads us to believe after all that our friend's inventory remained about the same, and that in the last analysis the "cost of goods sold" with him was the practical equivalent of the year's purchases. Otherwise, his net profits would not so nearly have accumulated in actual cash, but would have been represented in part by increased stock.

THE HALL OF FAME

HERMAN A. METZ ELECTED TO CONGRESS.

It is of considerable interest that Herman A. Metz, of Herman A. Metz & Co., now known as the Farbwerke-Hoechst Company, was a successful candidate for Congress on

HERMAN A. METZ.

the Democratic ticket, and that he will now be a part of the Wilson administration in national affairs.

Prior to this, however, Mr. Metz has led a conspicuous life in the civic and political affairs of Greater New York. In addition to being comptroller of the city, which many people in the drug trade knew about, he had served on the Brooklyn School Board under both Mayor Van Wyck and Mayor McClellan. He had been appointed by Governor Dix a commissioner of the State Board of Charities for a term of eight years. He had been appointed by Governor Hughes a member of the Charter Revision Committee of New York, and by President Taft an honorary commissioner to the American Exposition in Berlin held during 1910. In the meantime Mr. Metz had been conspicuous in a great variety of civic and reform work. He was at one time president of the National Civic Club; he is now chairman of the Finance Committee of the North American Civic League for Immigrants, and vice-president for New York State of the National Rivers and Harbors Congress. It would require much space, indeed, to give a mere list of the positions he has held, of the work he has done, and of the public organizations and private clubs with which he has been and is affiliated.

Born a poor boy, he has become a man of wealth and of great business responsibility. At the age of 14 he secured a position as office boy in a concern which subsequently became known as Victor Koechl & Co., of which he has now been the head for the last twelve years. In 1903 he divided his business, continuing the drugs and medicinal products in the old firm, and incorporating the house of H. A. Metz & Co. to handle chemicals and dye stuffs. He became the president and sole owner of both corporations.

DEATH OF N. A. R. D. LEADER.

J. Arthur Bean, of Boston, a member of the Executive Committee of the N. A. R. D., and the man who came near being elected president of the organization at the Milwaukee meeting last August, was recently injured quite seriously in an automobile accident. James F. Finneran, Gardner F. Murphy, Fred A. Hubbard, J. N. Cran, and Mr. Bean himself were

J. ARTHUR BEAN.

driving in Mr. Finneran's automobile through the town of Wellesley, Mass., in the middle of the afternoon, when a car driven by the superintendent of the Water Department of the city suddenly appeared from a side street and struck the rear of Mr. Finneran's machine before it could be gotten out of the way. Mr.

Bean and Mr. Hubbard, seated in the tonneau, were thrown violently from the car. Mr. Hubbard escaped with a severe shaking up, but Mr. Bean was unfortunate enough to have both of his legs broken, compound fractures resulting in each case.

He was quickly removed to the Newton Hospital, where he was attended by a prominent surgeon from Boston. For several weeks thereafter he progressed as rapidly as could possibly be expected, visited daily with his family and friends, kept more or less in touch with his work, and was about ready to have a telephone installed at his bedside. On the night of November 10, however, he suddenly became worse and died before morning.

Mr. Bean owned two stores in the Somerville district of Boston, and was at the head of a coöperative cigar company in New England. He leaves a wife and a son.

THE FIRST VICE-PRESIDENT OF THE N. W. D. A.

At the meeting of the National Wholesale Druggists' Association, held during October in the city of Milwaukee, William B. Strong was elected first vice-president of the organization. As chairman of the Entertainment

WM. B. STRONG.

Committee at the Milwaukee meeting, Mr. Strong had commended himself favorably to every member, and his choice for the vice-presidency was one of great popularity. Further than that, he has been active in the N. W. D. A. for many years, and for some time has been a member of the Board of Control—that inner directorate of five men which really represents the power of the organization. In business life Mr. Strong is the vice-president and treasurer of the Milwaukee Drug Co. He is a man of pleasing personality, and has many friends in the Association. The Milwaukee Drug Co., by the way, has recently erected a new building for its operations, and it has one of the best equipped jobbing houses in the country.

A DRUGGIST'S RESIDENCE.

On another page this month we are showing the homes of six well-known druggists. A seventh photograph, for which there is no room in that place, we may reproduce here. It shows the residence of John Weyer at 2266 Harris Avenue, Norwood, Ohio. Mr.

Weyer is well known to Ohio pharmacists as the secretary and general manager of the Retail Druggists' Mutual Fire Insurance Co. of that State. It may also be said that Mr. Weyer was a member of the first board of pharmacy appointed in the State of Ohio. He served from 1884 to 1895.

THREE MARRIAGES.

The daughters of three men prominent in American pharmacy have recently been married. Elsie Baily Remington, daughter of Prof. Joseph P. Remington, Philadelphia, Pa., was married to Charles Carver, Jr., on October 24. Mary Belle Kennedy, daughter of E. J. Kennedy, editor of the *Pharmaceutical Era,* was married to Edward A. Dougherty on the evening of November 26. Natalie Nimmo Hynson, daughter of Henry P. Hynson, Baltimore, Md., was married to John Z. Bayless on the evening of November 27.

A New Prize Department:

QUESTIONS AND ANSWERS.

If there is anything the BULLETIN OF PHARMACY is proud of it is this, that most of its best and most practical material has come from readers of the journal themselves — from druggists, managers, and clerks actually working behind the counter. The BULLETIN has developed into a true co-operative agency—a place where our friends exchange ideas and methods with one another to their mutual profit and interest. As a further step in the realization of this ideal we now announce a new prize department of Questions and Answers.

$1.00 EACH FOR QUESTIONS.

The first part of the plan is that *we shall pay $1.00 each for all accepted questions.* What kind of questions do we want? Well, we do *not* want such questions as we answer monthly in our own department of "Queries"—questions regarding formulas, methods of preparation, manufacturing processes, and the like. This isn't the idea at all. What we are after are questions touching vitally on the conduct of the business—large questions involving important considerations. Thus, for instance, to show in detail just what we mean, and to start off the department properly, we announce this month the acceptance of the following three questions:

1. *What is the best location in the store for the soda fountain, and why?*
2. *What is the best, the easiest, and the most effective method of taking an inventory?*
3. *How do you collect your accounts and prevent deadbeats from getting the best of you?*

So much for the first group of questions. We want more for future issues of the BULLETIN, and we repeat that *we shall pay $1.00 each for all questions which we accept and print in the journal.* Now as for the second part of the scheme, let us say that we shall pay

$5.00 EACH FOR WINNING ANSWERS.

This month we solicit separate answers to the foregoing list of three questions. No one contributor need answer more than one question unless he desires. Three prizes will be awarded—one on each subject. That is to say, we shall pay $5.00 for the best reply to each question—$15.00 in all. In addition to this we shall probably print some of the answers which do not win the awards, but when we do we shall pay regular space rates for them.

Here are the conditions: (1) Each answer should be approximately 500 words in length, although no objection will be made to replies which are somewhat longer than this. (2) Answers must be in our hands not later than January 15. (3) Please write on one side of the sheet only and put your name and address on your reply.

Now, then, we are ready to start off. The first group of answers will appear in the February BULLETIN. In that number we shall also print some new questions which have been accepted in the meantime, and to which replies will be solicited for subsequent issues—and so on month by month. We hope to secure by this method some excellent material. We want to get live questions touching the very heart of the druggist's business. We want to find out what druggists are really most concerned about in the conduct of their stores, and we want to have a flood of light thrown on these vital themes by men all over the country.

Please therefore send in both questions and answers—the more the merrier!

THE EDITORS.

This beautiful mission bungalow is the home of J. Y. Pearce, the owner of two drug stores in Ballinger, Texas. There is a large court and fountain in the center, surrounded by plants, flowers, and sea-shells.

Frank Farrington, of Delhi, N. Y., until recently a retail druggist, and a well-known writer on commercial subjects for the pharmaceutical journals, has lately purchased this hand some colonial residence.

Every alumnus of the St. Louis College of Pharmacy will be interested to know that this is the residence of Prof. James M. Good, who has held the chair of pharmacy in that institution for many years.

W. S. Parker, of Lisbon, North Dakota, who has been a member of the State Board of Pharmacy for a considerable period, has a big playground for his family, while an automobile may be seen in the back yard.

Here is another druggist with an automobile—Charles F. Nixon, of Leominster, Mass., a professor in the Massachusetts College of Pharmacy and a member of the U. S. P. Committee of Revision.

L. W. McConnell of McCook, Nebraska, is a member of the State Board of Pharmacy, and is one of the solid and substantial druggists of the State. He may always be found in attendance upon the annual meetings of the State Pharmaceutical Association.

Homes of Druggists Here and There.

Eugene Watrous, Enid, Okla., elected last month to the State senate for four years. Republican.

Will Brookley, Edgar, Neb., elected last month to the State senate. Democrat.

Frederick W. Blocki, Chicago, Ill., elected as a Democratic member of the Chicago Board of Review.

W. C. Reser, Bristol, Tenn., member of the City Council and State Coal Oil Inspector.

Al. A. Lenocker, Oakland, Iowa, reëlected a member of the Iowa General Assembly.

T. J. Shannon, Sharon, Tenn., who is serving his third term as mayor of the city.

Henry O. Carhart, Blairstown, N. J., elected a member of the New Jersey Assembly.

George A. Hastings, North Adams, Mass., Republican candidate for the State senate.

David J. Kuhn, Nashville, Tenn., serving his second term as a member of the City Police and Fire Commission.

Druggists in Public Office.

Three Prize-winning Vacation Stories.

In order to stir up a healthy rivalry, and to uncover hidden and unsuspected literary talent, Parke, Davis & Co. offered their employees last summer three cash prizes for the best narratives describing vacation experiences. The editors of the BULLETIN are much pleased to be given the privilege of printing the three prize-winning stories. It will be recalled that we ourselves conducted a similar contest a couple of years ago. So much interest in the subject was then exhibited by our readers that we feel sure of a hearty reception for the present group of articles.—THE EDITORS.

1. AN IDEAL VACATION.

BY WINONA WILSON.

One of the requisites of an ideal vacation, to my mind, is that there shall be none of the every-day routine and hurrying—none of the eternal getting somewhere, everywhere, (and sometimes nowhere!) on the minute. It therefore required much quiet reasoning with myself on the morning of my departure for the country last June, when, upon waking, I found that I had but one short hour to rise, dress, pack, eat my breakfast, and get away. By absolutely refusing to lose my head, however, I arrived at the station fully five minutes before the train started, and, after comfortably settling myself and depositing in my suit-case sundry articles which had been thrust into my hands at the last moment, I was prepared to enjoy my journey.

HUMAN NATURE AS SEEN ON A TRAIN.

Few sensations give me more pleasure than riding on a train—there is so much to see, both inside the car and along the way. People display their characteristics so unconsciously and unblushingly when traveling that it is amusing, and oftentimes interesting, to observe them. I remember particularly, on this journey, a mother and her two sons. What first attracted my attention was hearing the mother say, in gentle, well-modulated tones: "Boys, wouldn't you like to take off your coats and roll up your sleeves?" Would they? Did you ever hear of boys who wouldn't? This would have passed without further notice, but presently I heard the attentive mother saying: "Boys, here are some cookies mother brought for you to eat on the train." And this, mind you, without a word of coaxing or teasing on the part of the boys! And finally, when she gave them small portions of milk chocolate, and insisted upon the smaller boy stretching out on the seat when he became tired, and resting his feet in her silken lap, my admiration passed all bounds, and I thought: "Well, here is an ideal mother!"

There were numerous changes to make during the day, however, and mother and boys soon faded from mind. Arriving at W—— about sunset, I took my place in the omnibus and prepared for a pleasant drive along two miles of winding roadway, between banks of wild roses and daisies. The small Ontario village where I visit is situated at the top of a high ridge or mountain surrounding Hamilton Bay, and every now and then we caught a glimpse of the blue water as we gradually ascended, while on either side of us well-tilled fields stretched into the distance, where the young grain was just beginning to break its way through long, straight furrows.

One was not to be left in uninterrupted contemplation of all this beauty, however, for the so-called "omnibus" was provided with long side seats only a few inches in width, and ever and anon, with the jolting of the wagon, came the feeling that you *must* slide to the floor and secure a firmer resting place. But this ordeal has lost its sting, and, upon looking back, I can see nothing but the winding road at sunset, the approach to the village through the long avenue of trees, and my aunt at the gate waiting for me.

LONG, PEACEFUL DAYS.

Then followed such long, peaceful days that the very memory of them still rests me. To sleep until noon; to eat as many or as few meals as one desires; to sleep again—surely this is rest which best appeals to the tired worker! After a few days of this drowsy ex-

istence, however, one begins to feel an interest in the surrounding country, of which just a glimpse was obtained during the drive from the station. And for the purpose of calmly viewing the country, and enjoying the beauties of nature, let me recommend a blind horse and an old-fashioned carriage. Automobiles are very well for those with whom speed is everything, and a spirited horse is a joy forever, but when you wish to loiter along and drink in the scenery, a blind horse, I say, is the thing.

THE MERITS OF A BLIND HORSE.

Our horse is something of a village celebrity, being preferred by certain ladies for driving because of her extreme safety. Except when engaged in this gentle service, she roams the hills from dawn till dark, and when fully harnessed and ready for the road (blinders and all), Dolly has the appearance of a perfect horse until you look into her poor, sightless eyes. They say she knows the roads for miles around, but, while this may be true, it requires much skilful management to keep her to the middle of the road. Her absolute dependableness, however, counteracts this slight inconvenience, for Dolly is afraid of nothing. Automobiles? They mean nothing to her, for she has never seen one, and tourists stare in wonder when Dolly ambles along without even winking an eyelash as their machines fly by. What pleasant drives we had with her! Stopping now and then to snap a particularly fine view, or to gather daisies and wild roses! Occasionally we alighted to strip a patch of wild strawberries of its luscious fruit, and once we stopped at a wayside creamery and had cool drinks of buttermilk.

So passed the long, quiet days—uneventful except for their very quietness—until the morning of departure arrived. There is an old-fashioned stage coach plying between W—— and the adjoining city, six miles away, which affords a pleasant variation from the regular mode of travel. Naturally, a city-bred person is always on the alert for adventures of this kind, and it seemed to me that the best way to ride in a stage coach was high up on the front seat, where nothing could obstruct my view of the passing scenery. I therefore climbed up beside the driver, who cracked his whip, and away we flew! Up hill and down dale! Over bridges and under bridges, and around dangerous curves where a speeding automobile might suddenly spring upon us! And then at last the long bridge across the bay, leading to the city!

Surely an ideal vacation, with lasting memories of rolling hills, blue sky and pleasant waters.

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2. VACATION INCIDENTS.

BY BERTHA M. MASSNICK.

A clang of bells, a shrill whistle, a bumping, jolting and straining, a slow gliding out of the busy station, and I felt that my vacation had begun in earnest. The speeding train soon lost to view the towering sky-scrapers of the smoke-blurred city.

Through open, hilly country, rich with promises of abundant harvest, we sped. Cattle dotted the landscape and a riot of wild bloom decked the wayside. Small, sparkling lakes and streams imprisoned in their mirrored surface the cloud-flecked sky, and reflected in their quiet margins the shoreline of trees, brush and stubble.

The train wheels seemed to take up Nature's refrain, singing "Peace and Plenty," "Peace and Plenty." And something within me escaped from the crowded, stuffy train and leaped to the freedom of space—out of the here into the nowhere.

"Eden!" "Eden!" called the sonorous voice of the brakeman. "Eden!" My daydream vanished, for Eden was my destination. So, gathering together my belongings, I stepped from the train into the heart of the country.

Mrs. Hostess met me with horse and buggy, and I enjoyed my first ride through the country to the farm home in Aurelius, the next small town. My friends had prophesied that I would not have enough interesting news to fill the line-margin of a picture postal. Well, here goes my line:

This little village comprises about a dozen widely-scattered homes, and two stores so small that in either of them one could almost touch the four walls by circling with outstretched arms. Nevertheless, the proud boast is made by both merchants that anything ranging from a needle to a haystack can be had for the mere asking, and from some nook or

cranny, after much patient searching and continued assurances that they have just what is wanted, it is produced, dusted, and handed over with a grin which quietly says—"I told you so!"

I adopted the country sombrero with becoming effect, but could not conceal from the natives my tenderfoot propensities. Even the ducks had me spotted as a city-bred. As I passed a pond where they were splashing and gossiping, they all took up the cry "Quack! Quack!" How did they know I was in the drug business?

One day Mrs. Hostess and I were on the porch, very busy doing nothing, when the hired man passed with a splendid four-horse team on his way to a gravel pit four miles distant. "Wish he would let us go along," I suggested. Mrs. Hostess asked him if we might go on an afternoon trip. He consented rather shortly with: "Sure, I'll be back at one."

CAUGHT IN A THUNDER-STORM.

One o'clock arrived, but no chariot and four.

"He is dodging us," I ventured.

"No; Jim said he'd take us and he will."

"Then he is cussing over the complications of a stiff collar and a four-in-hand."

At 1:30 Mr. Jim arrived, with a clean shave and a broad smile. After gallantly assisting us into the wagon he submerged himself into a silence out of which the wiles of neither of us could pull him.

The day was sultry and threatening, but we pinned our faith to the sunshine rather than to the distant, lowering clouds that looked so grim and threatening.

We jogged along leisurely. Beauty and fragrance greeted us all along the way. Countless voices twittered, hummed and sang, blending in perfect harmony with the peacefulness of the scene.

"Zip!" flashed a streak of lightning across the darkening sky.

"Boom!" rumbled the deep voice of rolling thunder.

Nature seemed hushed for an instant into breathless silence. Then the wind with its wailing song surged across the fields of rustling grain and through the tree tops, which swayed with groans at the increasing fury of the impending storm.

Blacker and more threatening lowered the sky. Flash after flash of blinding light streaked the gloom, and more ominously roared the cannonade, vibrating for a moment into sullen silence, only to break forth in fiercer blasts.

The horses were urged on to full speed. The sharp crack of their mailed hoofs struck sparks from the graveled road, and the heavy wheels crunched their song with that of the Storm King's mighty roar.

Mr. Jim emerged from his silence and informed us, by shouting and pantomime, that there was a barn around the approaching corner in which we might find shelter from the storm, if we could but get there before it broke. Meanwhile the vibrations of the heavy wagon made it almost impossible for us to keep our seats. Mr. Jim, however, stood braced with feet apart, and seemed not to be stirred by the heavy, tossing motion.

It was a mad and exciting race. Great drops began to splash about us as we neared the promised shelter from the opposite side of a barbed-wire fence. Satan could not invent a more perfect device than that fence for the cultivation of profanity. We made three attempts to scale the pesky thing, and almost decided to take the soaking rather than endure its fangs any further. A blinding flash and deafening roar spurred us to make another desperate attempt to conquer the thing. We finally succeeded in getting over, leaving a fluttering fringe of raiment behind us.

The rain descended in torrents as we ran for the shelter provided by a most dilapidated old barn which leaked like a sieve and which seemed to hold in malicious sport the vibrations of the storm's fierce roar. At our approach about forty little pigs scrambled in wild fright out into the storm. Such a chorus of protesting, indignant grunts and squeals! The storm was too much for them, however, and they ventured into the barn again and, crowding into a far corner, watched us anxiously, their pink snouts trembling with nervousness.

The storm lasted but fifteen or twenty minutes. The after-glow was a revelation of wondrous beauty. Everything sparkled and dripped through the grace of a good cleansing. Mr. Jim and team had gone on to the gravel pit a short distance away, so we walked there and stood on the hill while the wagon was being loaded.

The passing storm still flashed and grumbled in echoing calls and, gathering the trailers

of its sombre clouds, scurried forward to new fields of conquest.

Over us the sun was shining, the drained clouds floated in snowy splendor, and all the voices of nature resumed their songs.

A SUNDAY IN THE COUNTRY.

Awakened at an early hour by the joyous, flutelike notes of a song sparrow, my eye caught the first flush of sunrise through the open door. The voices of Nature called, and, hastily dressing, I went without. Sunbeams were already tinting the dew-covered earth with rainbow hues. Chanticleer called lustily; the lowing of cattle and the hum of the busy insect-world reached my ear; and I seemed listening to a morning song of praise.

An early breakfast followed, and then a drive through the country with my hostess. A breath of freshness and an air of peace prevailed. We were greeted by the merry song of a bubbling brook which dashed its way over stones and through a tangle of watercress. A short stop revealed the fact that we had found the birds' swimming pool. There they dipped and splashed and preened with much clatter, and, as they drank, lifted their tiny heads in what seemed like devotional thanks.

The country is so peaceful and restful, especially on a Sunday! The great threshing machines, harvesters and binders stand hushed in fields of golden grain.

Reaching home again, our next thought was luncheon. The woods at the end of the farm beckoned, and, packing a hamper, we answered the call. Such a royal salute greeted us! The song of the birds filled the wood with melody. The trees rustled a note of welcome. The ripening May-apple and the rich blend of woodland scents gave forth a fragrance unmatched by human skill. Where the sun had not as yet penetrated, the shrubbery and delicate undergrowth were festooned with ropes of dewy pearls and webbed lace. No weaver could match the texture and spring of the mossy carpet spread so lavishly with its wealth and variety of delicate ferns and wild flowers.

Soon the fumes of our dinner ascended from the crackling wood fire, and mingled with the fragrance of the forest. Besides a well-filled basket of goodies, our repast consisted of potatoes, bacon and coffee. Only by eating them, can one appreciate the deliciousness of potatoes baked in a sand oven.

Our table was beautifully decorated with dainty ferns and wild roses, which grew in abundance all about us.

The dinner was a happy success, and how we did enjoy it in our royal banquet chamber with a full orchestra of woodland songsters!

We lingered in our dell until the shadows lengthened, but coming out into the open we found the day still bright.

From a hilltop on our way home we viewed the sunset and the afterglow. It was gorgeous. The rich blending of color gradually faded away until it seemed as though we were in a bit of Dutch country, so deep were the blue shades of twilight. The windmills which dot the country helped to heighten the illusion.

The evening matched the perfect day. Countless stars studded the sky, and the moon hung as a golden crescent. As we sat silently on the veranda—each no doubt feeling too keenly the influences of the day to break the spell by speech—a host of inspired singers seemed to hover about, each hymning his song of praise to the measure of Nature's revelation to him. The evening was filled with melody and

Earth with her thousand voices praised God.

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3. A VACATION IN THE OLD HOME TOWN.

BY CHARLES H. MERRILL, M.D.

"Why not go back to the 'Old Home Town' for our vacation this year," suggests your dutiful 51 per cent. You had not been back for a long time at this season of the year. You had made one or two trips at Easter, and had been home once or twice at Christmas. But you, a boy brought up in the country, had not for years seen a "binder" or "sulky-plow," except from the window of a fast-moving train.

The suggestion is no more made than you act on it. You send a letter to "dad" that night, and then you begin thinking—thinking of the good times of long ago, of the "old tree" swimming hole, of the broad, shady streets and the places they lead to. As in a flash it comes over you. What is a vacation for if not for rest and quiet? With a whoop and a jump you catch a bundle of surprised

woman and girlhood in either arm, and as they try to pull away, with some doubt of your sanity, you exclaim:

"Will we go? Well, I guess yes! It will be the time of our lives."

THE TRIP OUT.

Four days makes a short time for ordinary planning and packing, but not this time. Saturday morning found you all ready and eager. You reach the suburban waiting room hot and breathless. The usual Saturday crowd is there, and it is some time before you can find the rest of your family. At last all are corralled, tickets are bought, and you join in the rush for the car. There are people enough for three cars, and you crowd and fight worse than any Black Friday you ever went through at Ann Arbor.

The old home road with its shading maples.

Finally the last fat woman and all her bundles are squeezed in and you start.

The ride is uneventful to you to whom the country is an old story, but to the wife who has lived in a city all her life it is a never ending procession of beauty. Far off across the hills may be seen the white patch of a field of buckwheat in blossom, outlined by the yellow stubble of cut grain or the green of waving corn. Closer in you see the winding course of a river with its overhanging willows. Here and there are cattle standing knee deep in the water, and as you flash by one shaded nook you see a dozen little white forms, naked as on the day of their birth, cut the water in one clean line as the rush of civilization flashes by. And so it goes. Through towns and farm lands the "Limited" rolls along until things begin to look familiar.

Yes, that's the "old Jones'" place. There is the "stone school house." Here is "Long Lake" with its wealth of pond lilies. Presently the houses come closer together. Some are new and pretentious, others old and weather beaten, but oh, so familiar! With a creaking of brake-shoes you round the corner into the main street.

It's the same old street—changed somewhat perhaps, but the main street of the "Old Home Town" will always be the same.

Dad is there to meet you at the waiting room. How different he looks from the men you know and see every day! Gray of hair and broad of shoulder! Clear of eye, and a healthy outdoor color in his cheeks! How happy he feels and looks as he helps you in. Maybe, after all, there *is* something wrong with his eyes, for you see him wipe the back of his hand over them two or three times at greeting you.

At last you are in the wagon and, giving the dancing, high-strung colts their heads, you start over that old, old road—the road with its high gravel center, its shading maples, its broad, well-kept fields on either side. Can you, will you, ever forget it?

As you drive along in the growing dusk you fall into the spirit of quietness and of rest that you know will be yours for the next few days.

LONG-FORGOTTEN DELIGHTS.

Vacations to many people always suggest a lot of bustle and going about. With you this year it is to be different. As the rested feeling, the "all-slept-outedness," comes over you, you think of that two-foot feather bed you slept on the night before and compare it with the "feathers" you are accustomed to in town.

You look at your watch. What, only five o'clock! In the city you thought it awful to get up at six. Here you have been up a whole hour and you feel like a two-year-old. As you go in to breakfast you compare this also with your usual morning fare.

Melons that you picked the night before! Cream from milk that you had tried to milk yourself but found you had forgotten how! Eggs that you helped find in the haymow! And ham—well, you had had no hand in securing that, but you had been out behind the

barn where a bunch of squealing, grunting "porkers" were making ham for next year, and you know of old how that ham tasted!

After breakfast you wander out into the yard and over to the orchard. Harvest apples in plenty and some of the other early ones are ripe. You see here and there a flashing, rainbow-colored butterfly. From every tree and bush comes a full-throated chorus and you try

The old swimming hole frequented twenty years ago.

to remember the names of the songsters. As a boy you knew them all, but now not one—unless it may be the robin's familiar note. A few years on the pavement, with hardly a bird to be seen other than the chattering sparrow, soon drives the bird lore out of a fellow.

During the long sultry afternoons you lie in a hammock, under the shade of trees whose leaves rustle with the ever-present breeze. As you doze and dream you hear the hum of bees and the chirp and twitter of the nesting birds over head. Your face and arms are burned with tan, and when night comes you go to bed tired in the right way, and sleep the sleep of a healthy man.

THE ANNUAL PICNIC AND FESTIVAL.

A day or so after your arrival you see the advertisement of the annual farmers' picnic and harvest festival. Did you ever attend any such affairs? If you would boil all the Mardi Gras, Hudson-Fulton Festivals, and Cadillaquas into one, you would never have the care-free, honest pleasure that is yours at one of these picnics.

You are up with the sun this day, and you start early for down town. From a point of vantage you can see the crowds begin to gather. Here is a load of boys from a threshing outfit who have laid off for the day. See how care-free they are! Sunburned to the color of copper, for all their big hats! Do you ever see their like in a city? And the wagons loaded with the farmers' families—the father, the mother, perhaps a grandmother and four or five children, and the bursting baskets of lunch!

Soon the sound of music is heard and down the street comes the parade—the fire department with gaily decked apparatus, the local company of the National Guard, a uniformed rank of local knights, the council, and others in autos and carriages. Prizes are given for the best decorated motor, business float, and farmer's rig. Many of the latter are decorated in natural flowers and grains. One especially that you could not help but admire is covered with cattail rushes and pond lilies.

And after the parade comes the picnic on the fair ground. You have gone to many a picnic where there was a mad scramble for a place on the boat, and a still wilder one for a bench on the picnic ground. But here you saw none of that. Each family party had its own circle. There were no benches or tables—just a cloth spread on the ground. But such a lunch! Fried chicken born since Memorial day. Hard

"A bunch of squealing, grunting porkers."

boiled eggs not twenty-four hours old. Layer cakes with frosting mountain high. Lemonade and new sweet cider to drink. And pie—oh, how your mouth does water! Here and there you will see perhaps a few watermelons, but whether it be melon or pickles, bread or cake, you may rest assured that it is fresh and good—better than you ever imagined existed.

Then when all have stuffed to capacity the sports begin. Two teams of farmer boys are settling up old scores at baseball, while their fathers wager cigars and even a furtive quarter or so on the races.

Pleasure and fun there are for all, whether it be the blasé city man or the small country boy, whether it be the city matron in her luxurious touring car, or the mother from the country whose son has just won the race for farm-bred colts. And as the afternoon sun begins to wane, and the crowd melts away, you ask yourself: Where was there ever another picnic like this? Where have people mingled before in such good fellowship and concord as to-day?

"OLD HOME" PLEASURES.

On the next day you go fishing perhaps, and the husky blue gill, or maybe a river bass, gives you a taste of what fight and fish really are. There comes a rainy day, but that is small loss to you. Into the library you go until the rain ceases. You have seen pictures of old-fashioned fireplaces? Well, picture one like some of these made of rough field stones, with books piled high on either side of the room. Start a brush fire in the fireplace, and see if you will change places with any of your friends who have gone to any of the so-called summer resorts?

And thus you while away your vacation. You are up with the sun. You go fishing two or three times, or go down to the same old swimming hole you frequented twenty years before. At night you hitch up and go to town. Perhaps it is "band night," and you meet the boys and girls you used to know. They are boys and girls no longer. Many of them are in business. Many are "Mrs." instead of "Miss," but once again you hear the old stories—hear again of old friends. You learn that "Bill" and "Dutch" are out west, that "Pink" went to Florida, and that such and such a girl has gone on the stage.

And then comes that day when you know you must cut loose. How you hate the thought of giving up the peace and quiet, the bounteous living, and again lock horns with other fellows and join in the endless routine of business!

BACK AGAIN!

But you are back again. How close and stuffy you feel in the city! How narrow are the streets! How shut in are the rooms! But as you stretch and pull yourself to your full height you feel the better for those few days in the open. You feel equipped to withstand the buffets of fate, knowing that somewhere there are green fields and cool breezes and big-hearted, generous people—people always waiting to welcome you back, to make you once again the man you were, to bring the tan of health to your cheeks, and to renew that contentment of mind which is the chief joy of the strong and vigorous man.

THE FUTURE OF MEDICINE AND PHARMACY.

An Interesting Prediction of Changes by a Pharmaceutical Philosopher—Both Doctor and Druggist will be Engaged in Preventing Instead of Curing Disease, and Their Occupations will Be Radically Different from the Present.

By WILLIAM G. TOPLIS.*

The year eighteen hundred and eighty-one is destined to become known in medical and pharmaceutical history as the beginning of the most revolutionary epoch in all of the experience of those branches of endeavor.

That year brought forth a discovery the importance of which is not yet generally recognized. Not alone is it concerned with medicine and pharmacy, but it has performed a most important service in engineering projects of world-wide importance. It may be truthfully said that this discovery and those it led up to made possible the building of the Panama canal.

It was a most important factor in bringing victory to Japan and defeat to Russia.

It is banishing pestilence from its breeding places everywhere, and no department of life, either animal or vegetable, is beyond its influence. It has placed the practice of medicine upon a scientific basis, and inaugurated the era of preventive medicine. The day of curative measures, with which we are most familiar, is passing. In most of the cities and large communities of the world public hygiene has be-

*Read at the 1912 meeting of the Pennsylvania State Pharmaceutical Association, and especially communicated to the BULLETIN OF PHARMACY.

come a very important department of government. Observe our own city of Philadelphia. We have there the largest water purification plant in existence. Its effect in that city is to reduce the number of typhoid-fever cases eighty per cent of the former total, and perhaps one hundred per cent of the water-borne typhoid, peculiar to the Philadelphia water-supply. A case of typhoid fever commonly runs three months. In money it is worth from fifty to one hundred dollars to the attending physician, perhaps half of that to the druggist.

CONTROLLING GERM DISEASES.

A similar change has taken place in diphtheria. Antitoxin and treatment are supplied to the patient at the expense of the communities in by far the greater number of cases.

Smallpox is practically unknown for similar reasons.

Bacterins and phylacogens as prophylactic and curative measures against typhoid, and a number of other diseases, are coming into increased usefulness.

Chemotherapy. The latest advance has done astounding things. With one treatment of "606," salvarsan, specific disease disappears, often returning no more.

Much is promised from the same source in the eradication of cancer.

Leprosy, incurable from remote antiquity, seems about to succumb to the new enlightenment.

The extermination of tuberculosis is within hailing distance. And so it goes through the whole category of ills that plagued the people, unrestrained, less than thirty years ago.

PROPHYLAXIS AND PHARMACY.

The transcendental discovery by Dr. Koch that has made possible all of these wonders and many others besides, and others yet to come, is the simple fact that microscopic organisms grow in pure culture, upon a piece of boiled potato. This is the corner-stone upon which has been built the whole science of modern bacteriology. With these facts confronting us and others of a like nature to follow, we naturally turn to inquire what effect these changes are likely to exert upon the practice of pharmacy.

Every pharmacist has observed the greatly increased development of the commercial side of the drug business as compared with its scientific side, which rather seems to be accorded a secondary place in the conduct of its affairs, regardless of the fact that this feature is the one that gives it character, and the only one that distinguishes it from ordinary merchandising.

Thirty years ago the physicians whom we knew were high-minded, dignified gentlemen. They held the ethics of their profession in such esteem that they scorned to violate them. We could not imagine any of them passing out a handful of tablets to an office patient for a fifty-cent fee. And yet the man of to-day who practices medicine under such conditions is to be condemned no more than his predecessors are to be commended, because each of them is a product of the conditions of his day. Truly the change is to be deplored, and the remedy is not yet ready. Thus we have a dreary spectacle, the most noble calling on God's green footstool degraded, through its commercial side, into a mad competition for existence. There are some other causes beside those noted that contribute to the same effect, such as the increased numbers of individuals in both medicine and pharmacy. The later causes, however, are self-limiting and not necessarily fatal to the calling as a business proposition, whereas with preventive measures well established it is plain to all that both the practice of medicine and pharmacy as now conducted come to their end.

NEW ORDER OF THINGS.

This does not mean that both doctors and druggists will disappear completely, but it certainly means that a new order of things is upon the threshold.

This is the year nineteen hundred and twelve.

Between the years 1922 and 1932 we may expect to have established a National Board of Health, with a chief officer in the cabinet and an organization similar to that of the army. Thus every physician and every pharmacist will be an officer of the United States government. Under the new order, those physicians who remain in the office awaiting the call of the sick will be comparatively few in number. The remainder will be out in the broad domain of practical hygiene. Every factory, farm, field, forest, stream, mine, and what-not will then come under the watchful eye of this new army. With all of the wisdom of science it

will guard the health of the country, if anything, more jealously than it guards against foreign foes. Every occupational disease will be banished; every case of communicable disease will be promptly isolated.

WHERE DOCTORS AND DRUGGISTS COME IN.

The men who are to perform this service will be the doctors and druggists of to-day who survive at that time, together with those who shall be hereafter graduated in those professions. Not that all of these men are at present fitted for this work, but their training and experience make them the most available. They will, however, be subject to periodic examinations that shall determine their advance and pay, and each one will graduate into the place that best suits his capacity.

The pay of these men will be suited to the dignity of their calling, certainly not less than that of a lieutenant in the United States army.

Under this new order the people will receive their medicine and medical treatment upon the same plan that they now receive their public school education.

To the incredulous it may be said that the people of Philadelphia alone spend annually fifteen million dollars for medical treatment and medicine. Under the new system the cost would be less than half of that sum, and the people would receive better attention than at present.

Schools of medicine and pharmacy will be government institutions as are West Point and Annapolis, and their various laboratories will be the main centers from which the operations of this hygienic army will be directed.

To the incredulous, again, it may be said, these conditions are coming not because they are being sought, nor even desired, but they will be thrust upon us through the force of economic necessity.

"MY BEST PAYING SIDE-LINE."

The Tenth of a Series of Special Articles—Trusses are this Druggist's Specialty—The Selection of an Instrument—How to Fit it Properly—Both the Commercial and Scientific Phases of the Work Discussed.

By E. C. REYNOLDS,
Iola, Kansas.

One of the things that made the greatest impression on us in selling trusses was the remark of a great many truss wearers: "I purchased my last truss from —— (mentioning a competitor), and it did not prove satisfactory; so I thought I'd go somewhere else this time and see if I could not get a better fit." That remark did not impress me so much at first, but continual repetition had its effect. The result was that I concluded that none of us were furnishing the proper truss for a given hernia in the great majority of the cases.

If we failed several times out of ten to furnish the correct size, style, or shape of pad, or if we had sold an elastic web truss when a spring truss would have given better satisfaction, there must certainly be some reason for it. It became our duty, then, not only to our customer, but to ourselves as well, to learn the causes of the more common errors and, if possible, to avoid them.

DIFFERENT KINDS OF HERNIA.

Obviously, all hernias were not identical. It was equally obvious that the same truss would not fit all kinds of rupture. All trusses were not alike. Therefore, a given hernia could not be held by any style of trusses. The conditions under which they were worn varied. Smelter workers and acid plant workers on account of the acid vapors in which they labored could get better results from a truss in which there was no rubber, or at least the minimum amount of rubber. This was true, too, of workers in cement factories who were exposed to heat and chemicals. Those whose habits were to a large degree sedentary and whose occupations demanded the maximum amount of comfort might better be fitted with an elastic truss of some good make.

Again, the proper pad should be selected. Customers have appeared before us with pads made of old buttons, these sometimes project-

ing into the very aperture in the abdominal wall. Others have worn water pads until the water was completely exhausted, the metal parts of the fittings making a protuberance in the pad that served to hold open and enlarge the aperture. This, of course, causes a more rapid enlargement than if no truss were worn. Certainly a water pad was not what these persons should have had. Neglect of the pad had in these cases not only failed to give them the relief they sought but had positively destroyed all chance of a cure by irritation which sometimes takes place in the earlier stages. In short, an ill fitting truss clearly does more harm than good.

THREE IMPORTANT CONSIDERATIONS.

Three things then stood out quite clearly. We must get a good general idea of hernias, their varieties and extent. We must select trusses to fit each variety, or at least come nearer to fitting the different kinds of rupture. Lastly, we must always instruct the wearer as to the proper application and use of the truss.

We find two varieties of hernias, inguinal and umbilical. These are about the only ones met with in our line, the inguinal constituting by far the greatest number of the cases. As a hernia is said to be a protrusion of a viscus from the confines of its natural cavity, it will be seen that one might occur at various points and from various reasons. Of the umbilical hernias we have little to say. We do not meet with them often in the drug business. They occur usually in the new-born, and are nearly always under the care of the attending physician, by whom proper measures for their relief are taken.

Umbilical hernias in adults are comparatively rare, although I have seen several. From my observation these occur mostly in men and are nearly always produced by the strain of heavy lifting. One occurring in a man who was a house mover by occupation grew to quite a large size in a period of two years before he would provide himself with a proper truss. We carry only a small stock of trusses for umbilical hernia, preferring to order them direct as needed.

I do not believe it within the province of this paper to cover causes and locations of hernia except for the purpose of applying trusses. For this purpose I invariably examine the customer, inquire into his occupation, and then feel myself in a position to offer advice as to the kind of truss that should be worn.

SELECTING A TRUSS.

For a simple oblique inguinal hernia where there is but a small opening that can be closed by an ordinary pad, we prefer one of the better grades of elastic truss. Should the hernia be of unusual size, filling the inguinal canal and threatening the external abdominal ring, or if it has already progressed to the stage of scrotal hernia, we endeavor to sell the special pad designed for scrotal hernias. This pad is also used exclusively by me for direct inguinal hernia as I find the large pad and the padded jock strap to be of inestimable service in retaining the viscus within the abdominal walls. And while the smaller pad may suffice, the larger one is more certain, under all conditions, to give the best results.

We give decided preference to the elastic web truss over any spring truss which makes pressure over the course of the sciatic nerve. The reason for this lies in the fact that pressure impairs nutrition with the result that the nerve is not nourished sufficiently to properly withstand the effects of exposure to cold and wet, thus giving rise to inflammation or "sciatica" in wearers of trusses. The elastic truss then is best for riders, drivers, farmers and those of sedentary habits who require the maximum amount of comfort.

Spring trusses with hard-rubber pads are desirable for acid workers, smelter employees, street-car workers, and men in similar vocations. Well fitted, they give all-round satisfaction and outlast the elastic truss.

Extreme caution should be exercised to see that all hernias are reduced before trusses are fitted.

ADVERTISING TRUSSES.

For advertising we use first of all our windows, the druggist's best advertising medium. Next I should mention show-case exhibits and counter wrappers. Once in a while an ad. in the local paper is desirable with such phrases as "Trusses accurately fitted," and "We guarantee our trusses to give satisfaction when properly fitted."

As to prices we get from one dollar and fifty cents to seven dollars, depending on the truss and whether we actually fit it. I have refrained from mentioning any manufacturer's name but will gladly give any information desired. We have built up a nice business in this profitable line and feel that the time was well spent.

A "SOUVENIR OPENING" AS A TRADE-WINNER.

By JAMES A. REID,
Laconia, N. H.

To increase one's business fivefold in five years, by the simple expedient of holding a "souvenir opening" on the first Saturday in April each year, is the remarkable achievement of Geo. A. Quimby, known as the "Yellow Front" druggist of Laconia, N. H.

Some ten years ago Mr. Quimby bought a run-down drug store in Laconia, a town of 10,000 inhabitants. To-day, due to his enterprise, it is considered the best equipped and most successful store in the city.

Price cutting or other unfair methods have played no part in Mr. Quimby's legitimate success. He says:

"I have worked on the theory that if I could once get the people into my store, I would stand a good chance of having them come back again. With this object in view, I inaugurated my opening souvenir day.

"In preparation for this day, I have made up a number of 'gift packages,' which contain free samples of soap, perfumery, etc., which are supplied by the manufacturers. I also put in a supply of carnations, one of which I give to every lady who comes into the store. The gentlemen receive a sample bottle, 10-cent size, of Welch's Grape Juice. Root beer is served free at the soda fountain. In the evening I have an orchestra play, and this feature certainly draws a crowd both into and around the store.

"Over 3000 people came into the store on Saturday, April 6, 1912. Almost every one made a purchase. Thus the increased expenses of the day were small owing to the increased sales. At the same time I noted many new faces and had a pleasant chat with many old residents who had never been in my store before.

Mr. Quimby's window decorated for his annual souvenir opening day.

"I believe the time to advertise is all the time! Putting this maxim into practice I use the local papers continuously. I mail a monthly bulletin to old and prospective customers under a red stamp. My show windows are never neglected and my yellow sign boards may be read for many miles along the State highway. This advertising is sure to attract newcomers to my store.

"To hold this new trade I provide plenty of carefully chosen clerks, which insures prompt

and courteous service, and I maintain a large, fresh stock at all times."

Any druggist in a small town cannot do better than adopt Mr. Quimby's methods. A short time ago he was a clerk in a small store. He now owns a large store of his own, a fine residence, an automobile, and a motor boat—everything in fact which marks the successful and prosperous business man.

His methods have made good.

WHAT THE A. PH. A. STANDS FOR.*

The One Broad Association which Represents Pharmacy in All its Branches—Its Sixty Years of Reform Work in Education, Organization, and Legislation—What it has Sought to do in the Past, and What it Seeks to do in the Future.

By JAMES H. BEAL,
General Secretary of the American Pharmaceutical Association and Editor of the official Journal.

Mr. President, Ladies and Gentlemen: It is my pleasant privilege to bring to you the greetings and good wishes of the American Pharmaceutical Association.

Ours is the oldest, and I believe yours is the next oldest, national organization in American pharmacy, and during the many years of their contemporaneous existence the relations between the two societies have been mutually cordial and mutually beneficial.

Your society has for its chief end the advancement of the interests of that branch of the drug trade which gathers its supplies in a large way from the many original sources of production and again distributes them in innumerable directions to those immediately concerned in their final delivery to the ultimate consumer.

To a considerable degree you supply the capital which enables the original producer to manufacture in large and economical quantities, while for the retailer you furnish an immediate source of supply for the thousands of items which he could otherwise obtain only at greatly multiplied inconvenience and expense. The business of the wholesaler is a proper and necessary one, and if carried on with due regard for the welfare of the retailer who acts as the last link in the chain of distribution, is a wholesome function that makes for economy and speed in the supply of those agents which are required for the alleviation of disease.

*An address read before the thirty-eighth annual convention of the National Wholesale Druggists' Association, held in Milwaukee, Wis., October, 1912.

THE CENTRAL IDEA OF THE A. PH. A.

While yours is an association that seeks the good of a special division of the drug trade, ours is one that strives to advance the interests of all who are engaged in any line of pharmaceutical work. The American Pharmaceutical Association recognizes pharmacy as a whole, as an aggregate of closely associated employments, and it aims to represent the collective interests of this aggregate.

This is its central idea, and the excuse and reason for its existence—the recognition of pharmacy in its entirety as one of the grand divisions of human activity.

The special organizations of pharmacy exist—and properly so—to conserve the special interests of the respective branches of the trade from which they derive their membership. The American Pharmaceutical Association exists to conserve the common interest, and to afford representation to every division of pharmacy and to every individual engaged in any branch of pharmaceutical work.

When a man comes to the A. Ph. A. he is not asked whether he is manufacturer, wholesaler, teacher or retailer, whether he is employer or employee. It is the value of what he has to say and not his commercial rating that determines the character of his reception. If the message is a valuable one it will be listened to as readily when it comes from the humblest member of the household of pharmacy as if it came from the head of the largest manufacturing establishment.

The American Pharmaceutical Association

believes that the interests of the several branches of the drug trade are so interrelated and so interwoven with each other that whatever operates to the advantage or disadvantage of one will ultimately operate to the advantage or disadvantage of all. While it concedes that the several branches of pharmacy have special interests of their own, it does not admit that the true conservation of these interests requires or justifies the invasion or destruction of the just rights of the allied branches. It believes that when any one division of the drug trade deliberately and selfishly seeks its own advantage at the expense of the just rights of the others it will provoke such reprisals from the branches discriminated against as will more than offset the temporary profit arising out of the unfair practice. The A. Ph. A. stands squarely upon the general proposition that the condition for which all should strive should be such an adjustment of trade and professional relations as would bring a due proportion of prosperity and a fair measure of reward to every honestly conducted drug enterprise. In short, it stands for that policy which is best calculated to bring the greatest measure of honestly and fairly gained prosperity to every individual connected with any and every branch of the legitimate drug trade.

THE A. PH. A. PROGRAMME OF PROGRESS AND REFORM.

The A. Ph. A. is an ethical organization and stands uncompromisingly for the conduct of the drug trade upon a high moral plane. Its first meeting at the New York College of Pharmacy, in 1851, was called for the consideration of legislation designed to restrict the adulteration of drugs and to demand the better enforcement of the Federal law against the importation and sale of spurious or inferior articles of materia medica. This was the first organized movement in this country against the misbranding and sophistication of drugs and medicines, and the association has ever since been in the forefront of the movement which culminated in the Food and Drugs Act of 1906, and in similar acts in the various States.

Thus the first great plank in the A. Ph. A. platform was legislation and its efficient enforcement—not legislation which meant merely increased profits to the pharmacist, but legislation for the general public good.

At its second meeting in 1852 it added the subjects of education and organization to its programme of reform, and in the advocacy of these it was and has been as unselfish as it has been in its attitude toward legislation. It has sought the benefit of all rather than the special profit of a single class of individuals. Although the earlier meetings consisted largely of men connected with the colleges of pharmacy, the association adopted resolutions urging the creation of other colleges in cities where they could be properly supported. Neither has it sought to draw all pharmacists into its own membership, but rather to promote the organization of pharmacists as a general plan of progress, and has constantly urged the establishment of associations in every city and State, and it is largely as a result of this policy that practically every political division of the country and every branch of pharmacy now has its own representative society.

Thus for more than 60 years the key-note of A. Ph. A. activity has been education, organization and legislation—not in a selfish, narrow and small way, but for the general good of the whole of pharmacy, and for the general good of humanity.

It is upon these broad and liberal lines that it expects the cordial support alike of the manufacturing and wholesale pharmacist, of the retailer and his employee, of the educator and the members of the boards of pharmacy, and of every one connected with the business of supplying medicinal agents. And it believes also that its broad and humanitarian policy entitles it to the respect and gratitude of the medical profession and of the American public.

THE A. PH. A. BOTH PROGRESSIVE AND CONSERVATIVE.

In its attitude toward reformatory measures it has been at once both progressive and conservative. It has been progressive enough to grant a full and impartial hearing to new doctrines, but it has been conservative enough to refuse them indorsement until their value has been plain. It is willing that new things shall be proposed and tested, but it insists upon holding fast to that which has been proved to be good.

If I have interpreted the spirit of its policy aright it is to the effect that improvement in pharmacy must come through slow and pa-

tient evolution—evolution guided by careful thought and foresight—and not through sudden and drastic revolution.

This attitude has at times brought criticism from those who have been anxious to commit the association to the support of some lately invented panacea for pharmaceutical ills, but subsequent results have usually shown that the association was wise in its conservatism, and prudent in refusing to be stampeded in favor of more or less revolutionary policies. Most of the doctrines to which it has refused its assent are now known only to those who are curious in historical matters, while those which have had its approval are still active and vital elements in the accepted programme of progress and reform.

THE ETHICAL ATTITUDE OF THE A. PH. A.

The A. Ph. A. has sometimes been reproached for being hyper-ethical, and as preferring ethical ideals to the commercial prosperity of the druggist.

This assertion, in so far as it constitutes a charge that the A. Ph. A. has always preferred the good name of pharmacy to the profit that might be gained at the sacrifice of principle, is correct. It is this that has led the association throughout its existence to demand without ceasing the enactment and enforcement of comprehensive and efficient laws against adulteration and misbranding, and for greater restrictions in the sale and use of poisonous and habit-forming drugs. It is this which has inspired its struggle, in the face of strong opposition, for the higher education of pharmacists, and for the surrounding of the practice of pharmacy with restrictions that will efficiently safeguard the public welfare. It is this which has inspired its opposition to fraud and quackery in medicine, and its 60 years of propaganda for rational and ethical prescribing and compounding.

It was charged with being hyper-ethical in its constant protest against the excessive multiplication of proprietary medicines and against the flood of new and unproved synthetic preparations, but it has lived to see the day when this once derided doctrine is being invoked to save both pharmacy and medicine from the Frankenstein monster which unbridled commercialism developed.

It pleads guilty to being ethical and to holding high ideals of professional dignity and honor, but it does not admit the charge of being visionary and impractical. It is not true that the A. Ph. A. has been opposed to the exercise of sound commercial prudence in the drug business, or that it does not have a sincere concern for the business prosperity of the retail druggist, and from its foundation it has labored for the development and exercise of better business methods on the part of those engaged in this branch of pharmacy. The great majority of its members are directly engaged in the dispensing of drugs in a retail way, either as proprietors or as employees, and it recognizes the plain fact that under existing conditions it is necessary for the druggist to deal in many things not described in the Pharmacopoeia, and not a part of the materia medica. It does not reproach him for handling side-lines, and for other things that he must do in order to adjust his business to commercial conditions over which he has no control, but it does insist that whether the pharmaceutical end of the drug store be large or small it shall be conducted along clean and honest lines, and it also insists that ethical pharmacy is the essential nucleus around which the drug business, whether manufacturing, wholesale or retail, shall be built.

It admits and even defends the right of the druggist to supply the ready-made medicines for which there is a popular demand, but it contends that he should not stultify himself by countenancing those that he has reason to believe are fraudulent or contain poisonous or habit-forming drugs in dangerous amount, and it protests against the folly of inviting the support of the physician and at the same time competing with him by counter-prescribing and the active exploitation of remedies concerning the effects of which he knows little or nothing.

It stands for a degree of professional and technical education on the part of the dispenser of medicines that shall be commensurate with the importance of that function. It stands for as high a code of ethics in commercial transactions as in professional, and it believes that no business policy is sound that does not square with the honor of a gentleman and the duty of a good citizen.

It contends that these are not visionary and impractical doctrines, but doctrines dictated by truly enlightened self-interest, and that phar-

macy will render itself the best service by adhering to them.

THE COMMON INTEREST IN LEGISLATION.

Nowhere is the common interest of all branches of pharmacy more plainly apparent than in matters of legislation, both State and national.

While my work has been more closely allied to the retail branch of pharmacy than to any other, I cannot conceive of any species of general legislation affecting the sale of drugs or admission to the practice of pharmacy that is not of material concern to all. The final result of its enactment will be either a benefit or a detriment to all, and our united efforts should, therefore, be exerted for or against it.

We have a common interest in seeking legislation that will best promote the development of our art and best protect the public against the sale of inferior drugs and fraudulent nostrums, and we have an equally common interest in defeating the measures proposed by grafting legislators, or by well-meaning but ill-informed reformers, which would seriously hamper or even destroy legitimate business without reaching the abuses at which they are aimed.

If the latter class of measures would effectually control the sale of fraudulent nostrums and habit-forming drugs we might well afford to submit to considerable inconvenience for the sake of the general good, but knowing as we do that a large proportion of this business is carried on entirely outside of the recognized drug trade, and knowing also that such laws would needlessly hamper the necessary and honest traffic in important drugs without in the least controlling the illegitimate traffic they are intended to restrain, then self-respect and common prudence demand that we should present a united opposition to them.

But our policy must not be one of mere negation. While opposing improperly drafted and ill-advised legislation, we must be prepared to urge the enactment of that which will be truly restrictive, without being destructive to legitimate business interests.

Our policy must be constructive, it must be aggressive, and it must show beyond cavil that the legitimate drug interests of this country are sincere in their efforts to properly control the traffic in fraudulent or dangerous nostrums, and the improper sale of habit-forming drugs.

THE PROPOSED LEGISLATIVE CONFERENCE.

It was this thought that led the A. Ph. A. at its sixtieth annual convention, held at Denver in August last, to adopt a series of resolutions calling for a general legislative conference in the following terms:

"(1) That this association hereby calls a conference to be made up of delegates from the various national pharmaceutical associations to consider the subject of legislation, both State and national, in its relation to pharmacy.

"(2) That the general secretary is instructed to send invitations to each of the national associations requesting the appointment of delegates to such conference.

"(3) That such conference shall be held at Washington, D. C., some time prior to January 1, 1913.

"(4) That the temporary chairman of the conference shall be appointed by the president of the American Pharmaceutical Association, and the general secretary shall act as temporary secretary of the same.

"(5) That such conference shall elect its own permanent officers, and after its organization shall be considered as representing all of the associations sending delegates to the same, and shall not be considered as being conducted under the auspices of any particular organization."

In taking the initiative in calling this conference our association was not actuated by any narrow desire to claim precedence among other national organizations, but acted by virtue of the fact that its membership includes representatives from every branch of pharmacy, and from every political division of the United States and its foreign possessions, and by the further fact that during all the years of its existence it has constantly striven for adequate legislation regulating the sale of drugs and the practice of pharmacy.

The terms of the resolutions make it plain that the A. Ph. A. does not seek to dominate the conference, and that after it has been called to order by its temporary chairman the conference will become the master of its own destinies, and will not be regarded as representing any one division of organized pharmacy more than another.

It is our expectation and our desire that your association will be represented in that

conference by those who will be able to give it wise and prudent counsel.

THE DUTY OF PHARMACY TO THE A. PH. A.

Formerly I urged pharmacists to become members of the A. Ph. A. because of the personal advantage of membership, but, although the value of membership is greater than ever before, I now urge them mainly upon the ground of their duty to the calling which affords them a livelihood, and of their duty to the society that for more than three score years has been the conservator of the best traditions of pharmacy and an ardent champion of its rights.

Upon the same grounds I present it as your duty as individuals to become members of our association, and thus strengthen its hands in the efforts to realize its ideals, and show that you, too, are in sympathy with its work for clean and honest pharmacy, and willing to contribute toward its attainment. I believe that it is also your duty to see that the members of your respective scientific staffs become members and contribute to its proceedings and to the columns of its official organ, a publication that does not enter the field of the independent drug journals, and that endeavors to represent the principles for which the association stands by accepting advertisements for only strictly ethical remedies, and by preserving an even balance of judgment and standing for fair play and justice between all divisions of the drug trade.

RULES FOR DRUG CLERKS.

By O. P. McPHERSON,
Gloster, Miss.

I have impressed certain rules upon all of my drug clerks. Since a number of other druggists have asked me for them, I submit them for publication. They may apply somewhat to clerks in other stores as well as employees in the pharmacy.

1. Pay your clerk all the business will warrant.

2. Let him know in the beginning that he is to WORK.

3. He must be a boy of good habits.

4. He must be honest and polite.

5. He must open the store at a reasonably early hour and have a regular hour to do it.

6. He must keep the store open reasonably late, and have a regular hour to close.

7. After opening the store, the first duty is to dust the counter and desks and then sweep the floor.

8. See that all books and papers are in order on the desk. Never destroy papers left thereon by the proprietor unless so ordered.

9. Never leave circulars, almanacs, etc., scattered on the counter. Have a place for them where it will be convenient to hand them out to the trade.

10. Never make a sale without giving out some of the advertising of the store.

11. Never give any one customer too much advertising of any kind. If he be a man give him such literature as will interest a man; if a woman, give her ads. of toilet articles, poultry, cook-books, etc. Always note the results.

12. Always help the proprietor keep an accurate mailing list, or keep it yourself. If you haven't one, make one.

13. Never leave funeral notices on the counter more than one day.

14. Never say "I" can't sell you goods at cost, or "I" have certain goods ordered, but say "we" can't or have.

15. Always endeavor to be humble and polite to all the trade; have plenty to say, but never talk too much.

16. Never speak impudently or get fresh to men older than yourself.

17. Never whistle, wrestle, whittle, or talk boisterously in the store.

18. Never entertain loafers in the store, but do not insult them. Simply have your work to do and keep on doing it.

19. Never wait on a lady with your hat on. It is best not to wear it at all in the store.

20. Never play tricks with drugs, or joke about medicine.

21. Never loan another your store keys. Always go with them.

22. Never idle away your time, or rather

your employer's time. Be as honest with it as you are with his money.

23. Never attend entertainments without telling your employer where you will or can be found. Don't attend too many at any rate.

24. Don't dress beyond your income, nor indulge in buggy rides.

25. Never play checkers or games of any kind in the store. Steer clear of baseball games. Don't get the habit.

26. Never ask for a raise in your salary. Nor quit a reasonably good job that is permanent for a better paying position that is uncertain.

27. Never attempt to fill a prescription unless you are the prescription man.

28. Never leave the store for anything unless you notify the proprietor and other clerks.

29. Never refuse to obey a reasonable order given by a superior clerk of the house.

30. Never loan money, pay freight, or any other bills without authority from your superiors.

31. If goods are to be charged, stop and charge them; if a credit is to be made, stop then and there and make it.

32. Never give a wholesale order without instructions. Never open mail that belongs to the store.

33. Never open an account without instructions from the proprietor.

34. Study your stock closely and know where everything belongs. Never keep a customer waiting on account of your ignorance.

35. Never sell anything unless you are sure you know what you are doing.

36. Watch your show windows and cases and keep them attractive. Change them once a week.

37. Study methods of business men, and don't forget you are learning and don't know it all.

38. Let any boy follow these rules as near as possible and see how quickly his salary will jump right along from $15.00 a month to $75.00.

How the Druggist's Sundries Are Made.

SEVENTH PAPER: CORKS.

A Large Industry—The Importation is Over Five Million Dollars Annually—The Different Steps in the Manufacturing Process from the Stripping of the Trees to the Production of the Finished Stoppers.

By OTTO RAUBENHEIMER, Ph.G.*

A paper on cork may seem trivial to many, but I have been prompted to write one for the following two reasons:

1. The average pharmacist, who uses corks daily and considerably, has but very little knowledge of the source and manufacture of that necessary commodity.

2. The books in English, especially those available to the pharmacist, *i.e.*, works on pharmacy and botany, and also the dispensatories, have little or nothing to say as to the history, origin, and manufacture of cork. Through an introduction to the owners of one of our large cork factories in Brooklyn I had the good fortune of visiting their plant in operation, thus obtaining a great deal of practical knowledge.

SOURCE AND HABITAT.

Cork is derived commercially from the cork oak, principally from *Quercus suber* L., an evergreen tree, and to a smaller extent from *Quercus occidentalis* Gay, which loses its leaves yearly, as already described by Theophrastos. The trees are usually from 20 to 40 and sometimes 60 feet high, and measure 3 to 5 feet in diameter and attain an age of about 2000 years. The wide-spreading branches are generally thinly covered with small leaves, which are thick, glossy, slightly serrated, and downy underneath. The tree flowers during April or May and the yellowish flowers are succeeded by small acorns, which when fed to pigs give their meat a peculiar

*Read and demonstrated with specimens at a joint meeting of the New York Branch of the A. Ph. A. and the Kings County Pharmaceutical Society. Printed in the *Journal of the A. Ph. A.*

piquant flavor, which has given a reputation to the Spanish mountain hams.

The cork oak is a native of the countries bordering on the Mediterranean Sea, especially Spain, Portugal, Algeria, and Morocco. It requires a temperature of 13° C., and does not thrive beyond 45 degrees latitude. The cork producing territory covers practically all of Portugal and part of Spain, namely, Andalusia and Estremadura in the South and Catalonia in the North. The total area covered by cork forests is estimated at about five million acres, and the annual production of cork wood is said to be about fifty thousand tons. Some of the very best bark is made into corks in Portugal and Spain, especially in Catalonia, but most of it is exported

Otto Raubenheimer.

as corkwood to the United States, England, Germany, Austria, etc. The principal shipping port is Seville. France obtains a great deal of corkwood from Algeria.

CULTIVATION OF THE CORK OAK.

The preservation and cultivation of the cork trees has been attempted and practiced for some time, especially in the southern part of France and Algeria. As early as 1859 a French work was written by Rousset: "Culture, exploitation et management du chêne-liège en France et en Algérie." The United States government in 1858 distributed seedlings, and I am informed that in the southern and southwestern section, cork oaks are now growing which in time will furnish cork.

The bark of the cork oak is covered with an epidermis up to its third year, which then bursts lengthwise owing to the growth of the corky layer underneath. The formation of the cork or dead cells or peridermis is done by the inner layer, the cambium, and continues regularly. When the tree is about fifteen to twenty years old it has a diameter of about five inches, or to be more correct, measures forty centimeters, according to the Spanish government regulations; then the so-called male cork or virgin cork is removed for the first time. This is of very little commercial value, being rough and coarse in texture. The removal of this virgin cork, however, promotes the further development of cork, because the inner bark, or cambium, the so-called mother-cork, undertakes at once the formation of a new covering of much finer texture and elasticity. The cambium with its life-giving sap forms two layers of cells each year, one within, which increases the diameter of the trunk, and the other without, which adds thickness to the cork. In about eight to ten years the cork layer becomes about 17 to 26 mm. thick and is then removed. This so-called female cork is more valuable than the virgin cork, but is not as fine in quality as the third and subsequent strippings, which follow at regular intervals of eight to ten years. The cork oak furnishes the very best quality of cork at the age of fifty to one hundred years; when the tree becomes 150 years old the quality of the cork gets poorer.

COLLECTION OF CORK.

This is performed by stripping it off the tree, using great care not to injure the cambium, in which case a reddish liquid will ooze out and no more cork will be formed at that part of the tree. The peeling is done from May to August in Algeria and during July and August in Spain and Portugal. The French in Algeria sometimes use saws, but the Spaniards employ hatchets with long, wedge-shaped handles. The bark is cut around the trunk and the branches in several parallel places, and the two incisions are then connected by several longitudinal cuts, following as much as possible the deepest of the natural cracks in the bark. By inserting the wedge-shaped handle of the hatchet, the cork

is then detached. The thickness of the bark is from one-half to two and one-half inches, and the yield varies, according to the size and age of the tree, from fifty to five hundred pounds. The gathered bark is next removed to the stations, where it is put into boiling water in order to soften the cork so the outer bark can be scraped off. This process reduces the weight of the cork almost 20 per cent. The boiling also extracts the tannic acid and increases the volume about 30 per cent. Being now soft and pliable, the bark is flattened and is packed and pressed into bales bound securely with steel bands.

These bales weigh uniformly 106 kilos, or about 224 pounds, so ten of them make an English gross ton.

MANUFACTURE OF CORKS.

Corks in olden times were of course made by hand, using a very sharp knife. This method is still practiced to some extent in Spain and Portugal. In fact the very best corks, *e.g.,* champagne corks, are entirely cut by hand. It is said that owing to their unevenness, *i.e.,* on account of not being exactly round, they make much better stoppers.

SORTING OF THE CORKWOOD.

The first step is the sorting of the corkwood, for although every bale is stamped A, B, C, D, etc., according to its quality, it is again assorted. It must be remembered that the thickness of the bark determines the maximum diameter, not the length of the cork, as the *cutting* is *done across* and *not with* the *grain.*

STEAMING.

As the corkwood is very dry and brittle after its long journey and storing, it is necessary to soften it so as to make it workable. This is done in large covered vats by means of steam. The steaming process makes the corkwood flexible and also slightly increases its bulk, and especially prepares it to undergo the following mechanical operations:

SLICING.

By means of a special machine, a slicer with razor-like circular steel knives making hundreds of revolutions every minute, the softened bark is cut into strips, according to the desired length of the cork. It can then be seen that the thickness of the bark determines the maximum width of the finished cork and that the width of the strips represents the length of the cork.

PUNCHING.

From these slices, by means of a blocking or punching machine, the straight or cylindrical corks are cut out. This is quite a dangerous operation and many a workman, who has to guide the strips to be punched, has lost one of his fingers.

TAPERED CORKS.

These processes, as we have seen, produce the straight corks. The corks used in pharmacy are the tapered kind. These are manufactured from the "straight" variety by passing them through a machine which by means of a very sharp circular knife "tapers" the corks.

POLISHING.

In order to produce a very smooth cork, they are polished by rapidly rotating emery wheels.

BLEACHING AND WASHING.

To clean the corks, which of course have become soiled through these mechanical operations, and in order to give them the white appearance instead of the reddish color of the natural corkwood, they are bleached and washed. This is done in very large vats, the first bath containing a weak solution of chlorinated lime, the second one of oxalic acid. The corks are then rinsed in hot water and dried by whirling in large revolving cylinders of galvanized wire netting. This quick drying is a necessity, as in slow drying the corks might develop a mold.

GRADING AND ASSORTING.

The last and perhaps most important step is the grading and assorting of the corks. This is done by girls, who in time become expert in this work, which they perform with such rapidity as to assort 20,000 corks during one day's labor.

STORING.

The proper storing of corks is of great importance. They should be kept not too dry nor too damp, as in the former case they become brittle and in the latter they get moldy.

In my own experience I have found the best way to keep the stock in the cellar but not directly on the cellar floor. For the corks in the store I keep a moistened piece of blotting-paper in each compartment. This will supply the necessary moisture and saves me a good deal of annoyance by "breaking off" when putting corks into bottles.

PACKING.

As is well known to every pharmacist, the corks are placed in five-gross bags. The slow counting has been replaced by the quicker weighing, the weight of each five gross of the different lengths and grades being known to the manufacturer.

SCALE OF DIAMETER OF CORKS.

There is no special rule as to the length of the corks, which are usually graded as short, regular, long, and extra long. But there is a standard for the diameter of corks, the U. S. Standard. The corks are measured at the upper or larger end, and a cork with a diameter of 1 inch is called No. 10. The difference in each size is 1/16 of an inch. No. 9 measures 15/16 inch diameter, No. 8 measures $14/16 = 7/8$, etc.

FANCY CORKS.

There are corks which are branded on the side or have initials or monogram on top. Some are made with a polished wooden top, others with aluminum top. There are also corks provided with a rubber covering in place of the more expensive rubber stoppers. Corks having a camel's-hair brush inserted, as for corn cure, might also be enumerated in this category.

OTHER CORKS.

Besides the tapered prescription corks used by pharmacists, there are a great many other varieties—*i.e.*, the straight corks from the finest quality champagne corks down to the common soda-water cork; flat corks for wide-mouth bottles or jars, the co-called specie cork; shell corks with a perforated center, generally used with a sprinkler-top; disks—these are very largely used as a lining for metal bottle caps. The cork is sliced or split by very sharp circular saws, and from these flat pieces, about 1/9 inch thick, the disks are stamped out.

PARAFFINED CORKS AND OTHER ARTICLES.

Paraffined corks are prepared by rotating the dry corks in large hot drums with just sufficient melted paraffin to be absorbed. Through the rotating these corks are polished at the same time. Paraffined corks could with advantage be used much more than they are at present; they are especially useful for acid and also alkaline liquids. It may perhaps be not generally known that the reason the corks of some of the proprietary preparations, as milk of magnesia or milk of bismuth, are not attacked is because they are paraffined. I have some corks here which have been in contact with magma magnesiæ for over one year.

The discoloration of ordinary cork as well as the discoloration of the milk of magnesia can easily be explained, as the suberin in the cork is saponified by alkalies.

OTHER ARTICLES FROM CORK.

Among the numerous other articles manufactured from cork, life preservers are perhaps the most important. According to the U. S. regulations they must not weigh over seven pounds.

Other articles are ring buoys, mooring and anchoring buoys, yacht fenders, seine corks for fishing-nets, insoles and soles for shoes, floats for plasterers, wheels for polishing glass, balls to be used at seashore, artificial limbs, and a great many smaller articles, as bobbers for fishing-lines, handles for fishing-rods, bicycles and pyrographic instruments, tips for penholders, strips for eye-glasses, etc., etc.

The waste in a cork factory is tremendous, amounting to about 60 per cent. All of this waste is saved, even the dust at the various machines, which by powerful air suction is carried away by pipes. The waste is ground or powdered and utilized to manufacture linoleum, together with linseed oil, floor tiling, cork cardboard, etc.

The importation of cork into the United States amounts to over five million dollars annually. There is no duty on the corkwood, but 30 per cent ad valorem for manufactured material. The duty on cork stoppers up to three-fourths inch in diameter is 25 cents per pound, and above that 15 cents per pound.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

MAKING COLLECTIONS IN MEXICO.

To the Editors:

I notice that P. L. Gain of East St. Louis, Ill., in an article contributed to the *Era* on the subject of cash versus credit, favors a cash business.

It happens that we in Mexico are peculiarly situated. We are surrounded by people who pay their bills although they do not enjoy that reputation. In ten years our losses have averaged only one-tenth of one per cent. We have a system that seems to bring the desired results. At the end of the month we make out statements. These, by the way, are so printed that when they are folded in a transparent envelope, the name and address are visible through the wax paper.

Statements are mailed to customers at the end of each month. But we go over the books again on the 15th of the month following, and where we find a customer has not paid his bill on the first, we send him another statement made out on a special blank for the purpose. We thus advise the customer that his balance for the month before, amounting to a sum which we never fail to mention, has not received his attention and we solicit a remittance.

With a little tact we can make people pay their bills. For example, if the account is one of long standing and we are unable to get a reply from the delinquent, we make up a statement of his account omitting his last payment, no matter how far back that may have been. He generally comes into the store then mad as can be, but always gives our communication some attention. If he lives out of town, he will write, thus acknowledging the indebtedness, which acknowledgment will be of service in court proceedings.

Again, if the delinquent is a grocer who lives in a small town, we draw on him through one of his competitors, giving the latter power to close our customer's place of business if he refuses to pay. Since grocers are at loggerheads, this procedure usually brings us our money.

I feel that the small loss entailed by the credit system is insignificant compared with the increase in business that it brings us.

We have a well-organized delivery system and encourage orders by telephone. Furthermore we discourage our customers from paying our delivery boys unless the slip accompanying the package reads C. O. D. Less than 10 per cent of our business is done in English, nearly all of it being done in Spanish.

I believe that if druggists will adopt the proper systems and care for their accounts, they will feel universally that, regardless of nationality, it is the desire of all people to pay their debts. My advice is, use strategy if possible; if not use force, and the desired results will be secured. MILTON A. WARNER.

Torreón, Coah., Mexico.

FROM AN AUSTRALIAN READER.

To the Editors:

I'm very pleased with the July number of the BULLETIN, just received. May I take you into my confidence and tell you why? Because its information is just as useful out here as in your country. I may say, however, that I get a little tired each month to open up and find something about the N. A. R. D. But it is no doubt interesting to American readers. The article on optics, bearing the caption "My Best Paying Side-line," and another entitled "Operating a Soda Fountain," are very informing and are full of horse sense.

But, sir, I'd like a little information. You state on page 267 of the July number, under the heading "Anti-narcotic Restrictions," that 200,000 ounces of morphine are sold every year in Kentucky alone, and apparently laudanum and cocaine are freely sold also. Out here it is hard to get any of these drugs from the chemists. Are there not poison laws in your country?

I have been reading the "lay" of the Chemists' Assistants' Union of this state. As you are no doubt aware, our conditions are regulated by an award of the Arbitration Court, which is enforced by the government. Our conditions are much better than under the old system of taking what the employer was willing to give us. We expect shortly to have pharmacies closed at 6 or 7 P.M. Won't that be all right?

I wish success to your journal and hope

that you will continue to include articles interesting to Australians as well as Yanks.

Coogee, Sydney, N. S. W. A. C. DASH.

REGARDING THE SALE OF LIQUOR.

To the Editors:

You have always held in the BULLETIN that a physician's prescription is in itself not necessarily a legal defense for the druggist in the sale of liquor. Your position is, as I understand it, that a prescription must be written in good faith in order to protect the druggist, and that the druggist must know it was so written. I shall always agree with you in your contention, and so will every conscientious judge. Four druggists in a town of this State were last summer accused of violating the local option law. All had to pay fines, and one of them was sent up for thirty days. They were not accused, however, of selling liquor on prescriptions. They sold it in the customary way for "medicinal use, etc., etc."

The best thing a druggist can do when his town goes dry is to throw out the booze. He should even throw out alcohol, and buy his standarized tinctures and other preparations without the necessity of keeping alcohol with which to make them. As long as a druggist can say honestly that he has neither alcohol nor liquor in stock, he makes no enemies by refusing to sell the stuff. On the other hand, however, if people know that he has such things in the store, and if he will not sell it to them, then he gets himself in wrong. Throw out the booze! E. E. STEINER.

Lowell, Washington.

PATENTED SYNTHETICS AND THEIR IMITATIONS.

To the Editors:

Here is an addendum to the sulphonal prescription discussed in the department of "Letters" in the last two or three issues of the BULLETIN. The use of the unpatented sulphonmethane at 30 cents an ounce probably accounts for the 25-cent price for the prescrip-

The General Committee of the Eleventh International Congress of Pharmacy.

In this picture are seen the members of the Organization Committee of the eleventh International Congress of Pharmacy, which met at The Hague, Holland, in September. Those seated, from left to right are: Joh. Damen, The Hague, Holland, president of The Hague Branch of the Netherlands Pharmaceutical Society; L. Mouliets, La Teste, France; O. v. Schoor, Antwerp, Belgium; L. v. Itallie, Leyden, Holland, president of the International Congress of Pharmacy; R. J. L. Schoepp, Maastricht, Holland; J. J. Hofman, president of the Netherlands Pharmaceutical Society and member of the Health Commission of The Hague and Secretary of the International Congress of Pharmacy, The Hague; G. R. Ter Burg, Military Pharmacist of the First Class, The Hague; W. Hoffman, Aix-la-Chapelle. The gentlemen standing, from left to right are: E. White, London; M. Martin, Mons, Belgium; V. Haazen, Antwerp, Belgium; Dr. J. F. Suyver, secretary of the Netherlands Pharmaceutical Society, Amsterdam; Professor Doctor H. Thoms, Berlin; H. Moeller, Copenhagen; Dr. Schamelhout, Brussels.

tion given by one contributor. But what shall be done with the Bayer sulphonal on hand? Should druggists refuse to purchase the original proprietary? I personally prefer high quality to cheap prices. At the same time I meet with some difficulty in my charges, as some of my competitors "bait" my customers with cheap prices. They underprice prescriptions plainly marked with the N. A. R. D. cost mark.

Let me raise the question: Why pay $4.00 a pound for Ichthyol (Merck's) when Ichthynat, Heyden, can be purchased for $2.25, or Ichthosulfol for $1.95? Argyrol costs $1.50 an ounce, while Argentum Nucleinicum, Heyden, duplicate of Argyrol, is 90 cents an ounce. A long list of other duplicates are quoted to druggists. Is it substitution to use them when sulphonal, ichthyol, argyrol, etc., are prescribed? If not, why should some druggists purchase the high-priced articles mentioned, others the cheaper imitations offered under their chemical names, and then expect prices to be the same?

I would be grateful for opinions on this subject. D. A. FRICK.

Audubon, Iowa.

[Have our readers any opinions to express on this important question?—THE EDITORS.]

ANOTHER "QUICK" METHOD OF DISPENSING POWDERS.

To the Editors:

In the "Dollar Idea" section of the November number of the BULLETIN OF PHARMACY I note a "quick" method of dispensing powders used by R. B. Conant. As I always wish to adopt "time-savers" in prescription work I tried his method, and find it requires more time than the one I follow, to wit:

After the powders are divided on the powder tile, slide the tile to the edge of the prescription counter. Lay out the required number of powder papers. Then take one paper in the left hand, put it under the tile, and with the spatula slide the powder off onto it, next transferring powder to one of the papers on the desk, and keeping this process up until all the powders are thus disposed of.

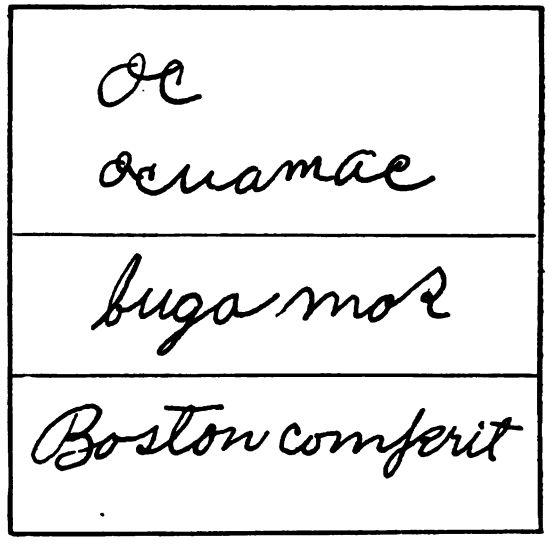
This method is quicker by far than the putty-knife and spatula plan followed by Mr. Conant. ROBERT BARRY.

Boston, Mass.

THREE GOOD ONES.

To the Editors:

I enclose a few sample puzzlers that we run up against in our work. We are in the very midst of the black belt down here, and we frequently get some interesting written as well as verbal orders from customers. The three articles wanted were nux vomica, oil of bergamot, and balsam copaiba. W. L. LAMAR.



Union Springs, Alabama.

A REQUEST.

To the Editors:

Would you mind announcing in the BULLETIN that I would like to reciprocate with fellow pharmacists and exchange copies of newspaper advertisements? I can send, for instance, types of ads. used in New York by the Riker people, the Liggett stores, or the department stores. A. P. SPERO.

266 Jay Street, Brooklyn, N. Y.

To the Editors:

I have read the BULLETIN during all the years that I have been behind the counter in the drug business, and I regard it as head and shoulders above all its contemporaries!

Snyder, Texas. F. V. CLARK.

* * *

To the Editors:

I could not get along without the BULLETIN. It is the best drug journal published.

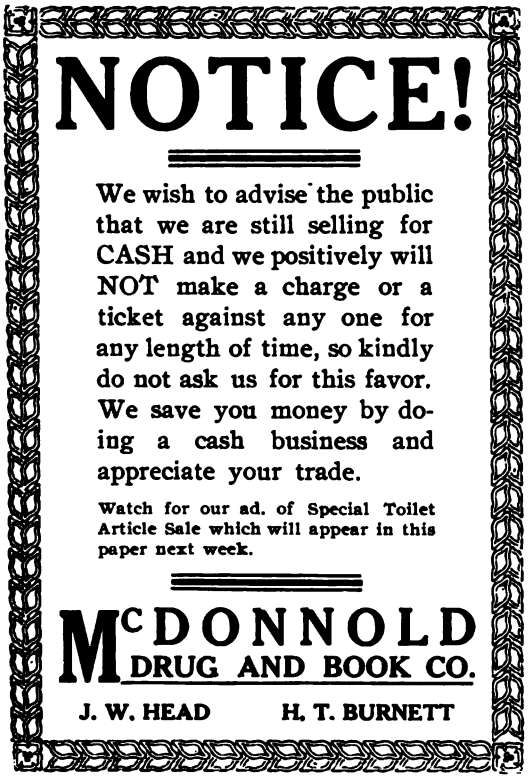
Augusta, Ark. H. G. FOLSOM.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Cash Business Only.—

J. W. Head, of the McDonnold Drug & Book Company, of Lebanon, Tenn., is a firm believer in conducting a business on a strictly cash basis. He writes that his firm has followed that system for three years and that it works beautifully. Mr. Head says he would like to see other druggists follow suit. The accompanying illustration shows one of the McDonnold ads. clipped



from the local paper. It indicates how the company impresses upon the people of Lebanon that it sells goods for cash only. Mr. Head adds that he will be glad to discuss the cash system more fully with any druggist who may write him. Meanwhile he would like to know how other dealers are faring who do business for cash only.

A Pretty Strong Advertisement.—

Frank E. Smallidge, of Detroit, is confessedly impatient with modern cut-rate methods, and with the extent to which side-lines are carried in drug stores. He is proud of his establishment, and once in a while he gets out a piece of advertising which certainly hits straight from the shoulder. We are showing this month one side of a recent card of his. It was just the size of a postal, although, unlike the latter, it could not have been sent through the mails except it was enclosed in an envelope. One side contained an advertising announcement: the other side bore a photograph of the Smallidge building. The photograph was taken

last spring right after a heavy snowstorm, and therefore had a good deal of pictorial value. The announcement on the other side read as follows:

QUALITY ALONE IMPORTANT IN DRUGS, AND THE BEST NEVER TOO GOOD!

Poor drugs sold at auction under the insidious, but very attractive, claim of cut-rate are NOT cheap, have NO value, and ARE dangerous. ASK YOUR DOCTOR. Why not buy your drugs from a real DRUG STORE, where the sale of picture cards and pie are not in direct competition with the prescription department, and where the quality supplied will permit you to live, enjoy life and prosperity long after the price has been forgotten? We offer you the protection of a safe, reliable drug store that has not been commercialized, demoralized, or paralyzed by department store methods.

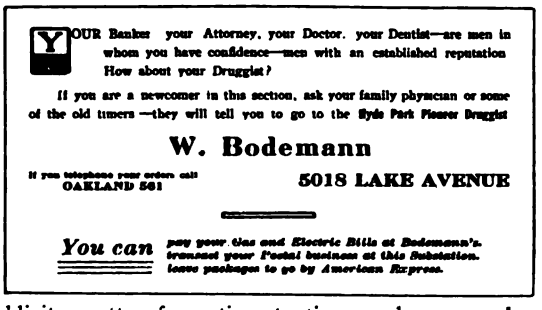
When you consider that for every good drug made there is also a cheap substitute, do you think a bargain counter is a good place to buy medicine, on which your health and, perhaps, life may depend?

Thanking you for past favors, and soliciting your continued patronage on the merit of the business, I am

FRANK E. SMALLIDGE.

Some of Mr. Bodemann's Advertising.—

Wilhelm Bodemann, of Chicago, believes in advertising his store. We have reproduced specimens of his



publicity matter from time to time, and we are showing another one this month. It is in the form of an envelope enclosure, and is evidently used also at the counter.

"Rendering Unto Caesar the Things That Are Caesar's."—

On page 480 of this department for November we reproduced the photograph of a very attractive perfumery window which had been sent to us some time before, but the authorship of which had been lost. We presented the child for inspection and offered to acknowledge its parents when they introduced themselves. We now find that the photograph was sent to us by A. Campbell, of the Central Drug Store, 2d Avenue, Saskatoon, Saskatchewan, Canada. It was used as an Easter display last year. Our thanks to Mr. Campbell—and our congratulations also on his good taste in window dressing!

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Condensed Conclusions.—

Watermelons contain about 47 per cent rind, 10 per cent pulp, and 43 per cent juice, and the last contains about 6.5 per cent of sugars.

The addition of 1 per cent of borax or of sodium hydroxide to corn-starch increases the viscosity of the paste, but large quantities of either decrease it.

A German chemist claims that sodium arsenite, if pure, is not oxidized in the air, but that if it contains sulphur or carbon dioxide, oxidation will take place in the air.

Caffeine and isotropine both form chemical compounds with chloral hydrate, which are broken up in boiling water.

Adrenalin can be made from the glands of cattle, hogs, sheep, or whales, or from the skin of certain toads. Adrenalin from whales is the latest to be studied.

Professor Ostwald says that changes in the color of dye solutions by acids and alkalies are due in part to changes in the colloidal conditions of the solution.

Glycerin is decomposed by ultraviolet light rays with formation of formaldehyde, acids, and other products. Hydrogen peroxide increases the rate of decomposition.

Water-gas tar is an effective weed-killer, and prevents the growth of fresh weeds. It is being tried on railroads—3000 gallons to each mile.

Professor Tschirch has identified storax, mastic, alepporesin, asphalt, myrrh, frankincense, and amber in the embalming material of Egyptian mummies.

F. Fillinger finds by experiment that alcoholic drinks cause a decreased resistance of the blood-corpuscles, and consequently a greater liability to disease.

Luminal, a new sedative and hypnotic, is receiving much favor in Germany. It is twice as strong as veronal and is considered safer and better for nervous patients.

G. Delani says that hypophosphites pass through the body unchanged, and if they have any action it must be an indirect action on the economy.

A. C. Houston finds that typhoid germs remain active longer in ice-cold water than in water at a temperature of the body.

TWO A. PH. A. SNAPSHOTS.—We are indebted to S. K. Sass, of Chicago, for the two pictures shown on this page. In this particular view we have a group photograph of such members of the A. Ph. A. as went to Yellowstone Park after the Denver meeting in August last. The picture was taken at Manitou, Colorado.

TWO A. PH. A. SNAPSHOTS.—Here we have a group of women pharmacists—not wives of pharmacists, but pharmacists themselves. They were snapped at Glacier Lake, and it seems quite evident that Mr. Sass is keenly interested in the subject of women in pharmacy.

The glass over electric lights, either arc or incandescent, cuts out most of the deleterious rays and prevents injurious effects. Arc lights without glass globes give out enough violet rays to be injurious to the skin as well as to the eyes.

The inventor of cold storage, M. C. Tellier, of Uruguay, is almost penniless, and a fund is being raised for his support. He is now 84 years old, and an example of the genius that benefits others rather than himself.

Dr. Bergins has made artificial coal from cellulose by heating with water, under a pressure of 1500 pounds. The coal produced was of the bituminous variety, but was chemically and physically identical with coal.

Certain varieties of rice starch give a red color with iodine instead of blue. Y. Tanaka thinks that this is due to a lesser absorption power of this starch, since the color is due to an absorption of iodine by the starch, and this variety appears to take up less than others.

M. V. Cruess says that in wine-making a small amount of sulphurous acid checks the development of wild yeasts and vinegar yeasts, without interfering with the normal fermentation. Hence better flavors in wines are insured by the use of sulphurous acid during fermentation.

The rapid increase in the cost of gasoline is forcing experiments to find a substitute in combustion engines. A combination of gasoline and kerosene is giving promise of solving the problem, the combination giving more power at a much less cost.

Anhydrous hydrocyanic acid is explosive, but the cause of this is not understood. The pure acid is something more than explosive, and it isn't safe to be too curious with it.

Uranyl nitrate decomposes at 100° C. into nitric acid and uranyl hydroxide. Uranium has a "rare" behavior, as well as a "rare" classification.

The American Cyanamide Company at Niagara Falls is doubling its capacity, and it has not yet been in operation two years.

Glycerin is oxidized by hydrogen peroxide into formic, glyceric, and glycollic acids, and if the peroxide is in excess the oxidation of the glycerin is complete.

A New Depilatory.—

Thallium salts taken internally cause the hair to fall out, producing baldness. R. Sabouraud finds that an external application of the salts acts in the same way, but locally, and he recommends the following ointment as a depilatory:

Thallium acetate	0.30 Gm.
Zinc oxide	2.50 Gm.
Rosewater	5.00 Gm.
Lanolin	5.00 Gm.
Petrolatum	30.00 Gm.

A small pellet of this ointment, no larger than a grain or two of wheat, is applied every night. Too free a use of the ointment is likely to produce poisonous effects.

New Idea About Valerian.—

French physicians—two of them, at least—claim that valerian when fresh is a valuable and powerful sedative and antispasmodic, but that the dried drug is practically inert. In order to avoid the effects of alcohol in connection with this drug, a juice expressed from the fresh drug, prepared without heat and without alcohol, is recommended. This is said to have little odor and to be almost free from valerianic acid. Valerianic acid is stated to be of no value except as a repulsive psychic treatment, while the juice of fresh valerian is not disagreeable and has a genuine sedative and hypnotic action.

Ointment Effects and Affects.—

F. Samland claims that iodine preparations are absorbed from ointments made with petrolatum faster than from similar ointments made with lanolin or lard. Methyl salicylate he finds is only slightly absorbed from lanolin, and more freely from petrolatum. Other salicylates do not act in the same way, some being absorbed more rapidly and completely from lard or lanolin. Absorption of medicaments from ointments is usually slow though prompt, beginning in one to four hours and lasting in some instances three days.

Ipecac in Dysentery.—

Dr. Rogers says that the alkaloids of ipecac are responsible for its influence in tropical dysentery. Emetine and cephaeline are found to destroy the ameba which causes dysentery in dilutions as high as 1 to 100,000, and this accounts for its action. In order to avoid the nausea which is produced by the internal administration, it is being tried hypodermically, salts of emetine or cephaeline being injected in doses of 1-6 to 1-2 grain. The effects upon the disease are very marked, but there is no nausea.

Easy Emulsions.—

A very stable but thin emulsion can be made by pouring a dilute solution of oil in acetone into a large body of water—about a thousand times the volume of oil. Such an emulsion can be boiled to drive out the acetone, and will then keep for years without separating.

Ye Camp Fire.—

Karl Meyer has found that briquettes composed mostly of pressed eucalyptus leaves and pine needles, when burned, give off formic acid in the smoke. The smoke is capable of killing tubercle bacilli even when sufficiently dilute for a man to remain in the room.

Detroit Druggists Entertained by Their Toledo Brethren.

Both Detroit and Toledo have successful and enthusiastic drug clubs. Recently the Detroit Drug Club was entertained by the Toledo organization, and this panoramic picture was taken just as the bunch landed at their destination. Royal entertainment was provided, and the Detroiters told enthusiastic stories upon their return about Toledo hospitality. Special songs were gotten up for the occasion, and a hilarious time was enjoyed from start to finish.

PRACTICAL PHARMACY

Perplexing Pills.—

R. Albro Newton presented a paper before the Section on Practical Pharmacy and Dispensing at the A. Ph. A. meeting in Denver on the subject of difficult pills. It appeared later in the *Journal of the A. Ph. A.*, from which we are pleased to quote in part:

"Veterans are sometimes baffled by the tasks which are set before beginners. Of the many prescriptions used as a test of the ability of students, there is one type which seems fully as bothersome to the dispenser of considerable experience, namely, pills of silver nitrate or of potassium permanganate.

"Bearing in mind the peculiar nature of these substances, we must all agree that ordinary excipients will not be allowable; something must be used upon which these active chemicals will not react. Looking in the text-books we find that kaolin or fullers' earth with petrolatum is suitable, but this combination makes anything but a nice pill mass to work.

"I have experimented to a considerable extent on the process which I am now to describe, and the product is pharmaceutically elegant and therapeutically active notwithstanding the fact that one unfamiliar with it would say offhand that the pills would be better as bullets than as medicine. Experiments have shown that the mixture is completely disintegrated in the stomach and the chemical is presented in an active condition.

"Now for the process. Suppose the prescription calls for a dozen 1-grain pills of potassium permanganate. Place 12 grains potassium permanganate in a small glass mortar and powder finely. Weigh out 24 grains of paraffin, place it in a small porcelain capsule, warm until melted; allow the paraffin to cool, and when it is congealed loosen it from the capsule by running a spatula around the edge. Put the powdered chemical in the center of the paraffin and work the permanganate into the paraffin quickly with the fingers. Warm a pill-tile slightly by pouring on it a little alcohol and igniting it, then wiping with a clean towel. Roll out the pill mass quickly into a pipe and cut this into sections and shape the pills with the fingers. No dusting powder is necessary or even desirable, but talc may be used.

"Not more than twenty minutes will be required to prepare this prescription. Permanganate stains on the fingers may be removed by a solution of oxalic acid in dilute sulphuric acid. In the case of silver nitrate, the hands should be washed in a dilute cyanide solution followed by water to remove the dangerous cyanide.

"Speaking of pills reminds me of another scheme which is not often mentioned in works of reference. Pills of ferrous carbonate are probably the most used ferruginous tonic and the official formula is of such excellence that improvements are apt to be frowned upon. However, I do not deem it a sacrilege to state that the addition of a small amount of petrolatum will serve to keep the mass soft a very long time, with the added advantage of retarding the oxidation of the iron.

"I would like to state at this time that I am aware that occasionally potassium permanganate and oxalic acid are prescribed in the same pill, the object being to secure a pill of freshly prepared manganese dioxide. In this case the reaction should be completed by triturating the chemicals together thoroughly and then massing with ordinary excipients, a process not unlike that for making ferrous carbonate pills."

A Larkspur Lotion.—

At the Denver meeting of the A. Ph. A., Otto Raubenheimer, of Brooklyn, N. Y., presented a paper before the Section on Practical Pharmacy and Dispensing on larkspur lotion. It appeared subsequently in the *Journal of the A. Ph. A.*, and we borrow the following:

> "A blockhead bit by lice put out the light and chuckling cried: Now you can't see to bite."

"This verse taken from Greek Anthology might have been true in ancient times, but the present generation with its motto, 'Time is money,' requires a quick and effective remedy against *pediculi capitis* or sometimes even the variety *pubis*. The preparations of larkspur seed, *Delphinium consolida*, have from olden times enjoyed a reputation and are still in great demand all over the United States."

Mr. Raubenheimer, after much investigation, suggested a larkspur lotion of the following formula:

Delphinium, ground	100 grammes.
Acetic acid	50 Cc.
Glycerin	50 Cc.
Alcohol	100 Cc.
Water, a sufficient quantity to make	1000 Cc.

Boil the ground larkspur seed with 800 Cc. of water, to which the acetic acid and glycerin have been added, for 10 minutes in a covered vessel. Set the mixture aside till cold, then add the alcohol and allow to macerate over night. Then filter and add sufficient water through the filter to make the product measure 1000 Cc.

"The finished tincture has a brownish-yellow color, resembling tincture of quassia, and a strongly acetic odor. It is clear, and even after standing about two months has remained clear. During this time I have sold it as 'larkspur lotion' at five cents per ounce, and it has given good satisfaction to my customers.

"I am making many experiments with this lotion with the object of improving it. I have tried increasing the acetic acid, glycerin and alcohol, and macerating and percolating instead of applying heat. I shall report on this at a later date.

"In my opinion the present lotion is far superior to a so-called tincture prepared by diluting 1 fluidounce of acetic fluidextract of larkspur with 1 fluidounce of alcohol and 14 fluidounces of water. The proportions in this so-called tincture are 60 and 60 in 1000 against 100 and 100 in 1000 in my lotion. The diluted fluidextract also forms a very heavy precipitate which very likely might contain some of the active constituents. And last, but not least, it does not require any pharmaceutical skill to dilute the fluidextract, while the preparation of the lotion gives the pharmacist a chance to practice pharmacy, and this, his birthright, he must not sell, as it will end his existence."

BOOKS

DUNN'S PURE FOOD AND DRUG LEGAL MANUAL. Volume I, pp. 2347. Edited by Charles Wesley Dunn, A.M., of the New York Bar; published by Dunn's Pure Food and Drug Legal Manual Corporation, 32 Liberty St., New York.

This work is a valuable tool in the hands of a discriminating and skilful artisan; but it will hardly enable a manufacturer or dealer to dispense with the services of a counselor in any matter of importance. For the purpose for which the work is intended it would probably not be complete without the mass of administrative decisions, rules, and regulations which are not law, as pointed out in the introduction, where we find: "The reader should keep in mind the distinction between the laws themselves and the rules and regulations, etc."

However, introductions and prefaces are rarely carefully read, and the non-professional reader is likely to conclude that the citations to adjudicated cases support the rule or decision, as the case may be, whereas the contrary is generally the truth. The statutes as construed by the courts comprise the law of the land, and a synopsis of the decisions of the courts in immediate connection, instead of the mere citations, would have made the work much more valuable without greatly increasing the space.

The topical scheme is altogether too intricate; being similar to the Corporation Manual published by the Corporation Manual Company, all the information contained in which may be found in the competing work published by the Ronald Press, containing about one-quarter the number of pages of the same size and even printed in larger type.

An ideal manual would be two volumes, one relating exclusively to drugs and the other to food. The Federal Statute as a pattern should be scientifically dissected, and in connection with each section or part of section should be printed an alphabetical list of the States having essentially the same provision; then the difference in the laws of the other States should be succinctly pointed out. For example: with respect to those affected by the law it might probably be truthfully stated once for all that individuals, co-partnerships and corporations came under the law in all the States. With respect to the act prohibited, it might be truthfully stated in two lines that the manufacture of an adulterated or misbranded drug product was prohibited by the laws of every Territory and State in the union; likewise with respect to the sale. When, however, we come to "giving away," "offering for sale," etc., it would be necessary to point out the peculiar features of the laws in each State, but this could all be brought within a single page.

Notwithstanding all this, as a book of reference the volume before us will prove almost indispensable to the law department or counselor of every manufacturer and dealer whose business extends beyond the confines of his own State. CHAS. M. WOODRUFF.

These three young men dispense delectable beverages at the fountain of W. M. Higham & Co., New Bedford, Mass. Reading from the left they are Cliff Higham, Will Morris, and Herb. Macy. Don't overlook the dog—pretty good looking purp!

AN ALASKAN VIEW.—This photograph, taken in Valdez, Alaska, is sent in to the BULLETIN by George G. Reis, a traveling representative of Parke, Davis & Co., who has presumably visited Alaska on a recent vacation trip. Of course you would expect to find snow in Alaska!

POTTER'S "THERAPEUTICS, MATERIA MEDICA AND PHARMACY."

There is a disposition among scholars to criticize any attempt to treat more than one science in a single book. Especially is this true in medicine and pharmacy. But a perusal of Dr. Potter's "Therapeutics, Materia Medica, and Pharmacy" must convince the reader that this feat can sometimes be accomplished in a creditable manner if the author only knows how. Dr. Potter's work, while devoted more especially to the physiological action of drugs, at the same time contains not a little pharmacognosy and pharmacy. The result is a most useful book to medical and pharmaceutical students. In a single volume are given the special therapeutics of diseases and their symptoms, and the practical pharmacy of the different drugs and chemicals used in medicine. There are various other subjects that properly belong here, such as directions for prescription writing, incompatibilities and antidotes for poisons. The chapter on serums and vaccines contains the latest information along those lines.

By way of showing the systematic arrangement of the text we might turn our readers' attention to the pages on iodine. First appears the general description of the metal, its physical properties and the dose. Then follow the preparations of iodine, preparations of the iodide salts, hydriodic acid preparations, unofficial iodine compounds and incompatibles of iodine. No new iodine compound of any importance is omitted. Next comes the physiological action, then the therapeutics of iodine, of the iodides and the synthetic compounds of iodine. The whole arrangement is admirable.

The book contains 916 pages, but is a compact affair and permits of easy carriage. The price is $5.00, net, in cloth. There is a thumb index in each copy. The pub-

lishers are P. Blakiston's Sons & Co., 1012 Walnut Street, Philadelphia.

ELEMENTS OF VEGETABLE HISTOLOGY.

Botany and pharmacognosy are big subjects. In the laboratory courses given in these branches of study there is need, therefore, of a brief volume which shall guide the beginner through the work. Daniel Base, Ph.D., of the University of Maryland, Department of Pharmacy, is the author of a small book that serves this purpose admirably. It is entitled "Elements of Vegetable Histology." As the name indicates, the book is a guide for students who are undertaking the study of plant tissues. A work of this character should meet with a ready reception among chemists or pharmacists who desire to make themselves expert in drug analysis and food inspection. By way of showing its practical character we point to certain chapters on "killing and fixing reagents," "schemes for making mounts of paraffin sections," and "stains and reagents used in the study of plant tissues."

To-day our food and drug laws have made the microscopical study of plants one of much importance. In fact, it were well-nigh impossible to detect adulterations in drugs without a working knowledge of plant histology. Dr. Base's "Elements of Vegetable Histology" should help beginners master this subject. The book is published by the author in Baltimore, Md. It contains 144 pages, bound in cloth. The price is $1.50.

A CRITICAL REVISION OF THE GENUS EUCALYPTUS.

Part XVI of this work has been received recently. It is similar and equal in all respects to the preceding parts, all of which have been reviewed in these columns. The present number deals with 13 species:

Eucalyptus oleosa var. *Flocktoni, E. Le Souefii, E. Clelandi, E. decurva, E. doratoxylon, E. corrugata, E. goniantha, E. Stricklandi, E. Campaspe, E. diptera, E. Griffithsii, E. grossa, E. Pimpiniana,* and *E. Woodwardii.*

It is the largest number yet issued, including 32 pages of text and 4 plates; three species, *E. Le Souefii, E. Clelandi* and *E. Pimpiniana,* are here described as new.

The author is J. H. Maiden, F.L.S., Government Botanist of New South Wales. This monograph is published by the Government at 2s. 6d. per number.

THE PHYSICIAN'S VISITING LIST.

We are in receipt of the sixty-second annual volume of "The Physician's Visiting List," published by P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, Pa. As usual, the price is $1.25 net. This book has been described in previous issues of the BULLETIN, and our readers are familiar with its character.

Munn & Co. of New York City, publishers of the *Scientific American,* have just brought out a little book entitled "Trade Marks and Trade Names." It presents in simple manner an interpretation of the Federal statutes concerning trade-mark registration and protection. Incidentally it shows what can and what cannot be registered as a trade-mark. The book will be furnished for 25 cents, and it will be found very useful to all those who are interested in the subject.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN *of the month following: (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.*

Mouse and Rat Poisons.

C. B. M. writes: "Can you give me the formula of a rat exterminator, white and powdered, that is harmless to dogs and cats? The rats, on dying, are mummified and dry up, leaving no offensive smell. I want something that can be sent through the mails."

The vermin killers which cause rats to die in their holes and still do not create a bad odor from the decomposition of the bodies are composed of tartar emetic or barium carbonate. The former is supposed to induce vomiting in larger animals than rats; hence such a mixture is claimed to be harmless to dogs and cats. Barium carbonate is supposed to cause intense thirst in the animals, and this fact has suggested the addition of calcium sulphate to such compounds, the result being that when the animals drink, the calcium sulphate becomes hydrated and consequently the animals are literally petrified. But while all this sounds plausible, we can't get over a suspicion that these special claims for vermin-killers are largely imaginary.

An analysis of one well-known vermin-killer showed it to be composed of strychnine 5.8 per cent, barium carbonate 45 per cent, soot and flour 49.2 per cent.

Whether or not you could send a product like this through the mail may be a matter of question. The post-office authorities allow some latitude in this regard, although the law forbids sending poisons through the mail.

S. Bros. complain that they, too, are having trouble with rats. They write: "Have you any formula which you could recommend for killing moles, rats, and field mice? The moles attack the roots of the coffee plants and the field mice destroy the cane. We have tried strychnine, but with little effect."

TO POISON MOLES.

Worms are dipped in a concentrated solution of strychnine in dilute sulphuric acid, and laid in the runs of the moles. This does very well indeed.

The following pill destroys moles very quickly when put into their holes:

Arsenous acid	½ grain.
Pulverized acacia	½ grain.
Starch	3 grains.
Syrup	q. s.

Make into a pill.

Strychnine has a better effect than arsenic.

RAT POISONS.

The following formulas are good rat-killers:

(1)	Strychnine sulphate	1 drachm.
	Sugar of milk	3 drachms.
	Prussian blue	5 grains.
	Sugar	½ ounce.
	Oat flour	½ ounce.

Triturate the first three ingredients in a mortar for five minutes, then add the sugar and flour. Mix well.

(2) White arsenic .....1 ounce.
Ultramarine .....10 grains.
Corn-flour .....½ ounce.
Sugar .....2 drachms.

Mix in the same manner as No. 1. From 10 to 20 drops of tincture of asafetida may be added.

(3) Powdered squill .....1 ounce.
Barium carbonate .....4 ounces.
Oil of anise .....5 drops.

Mix.

This formula is used by rat-catchers.

Several formulas for phosphorus paste have appeared in the BULLETIN before, and may be found by consulting the annual indexes in the December issues.

Chewing Gums.

E. M. S.—The making of chewing gums is by no means the simple operation which it seems to be. Much experience in manipulation is necessary to succeed, and the published formulas can at best serve as a guide rather than as something to be absolutely and blindly followed. Thus, if the mass is either too hard or soft, change the proportions until it is right; often it will be found that different purchases of the same article will vary in their characteristics when worked up.

Chicle gum is purified by boiling with water and separating the foreign matter. Flavorings, pepsin, sugar, etc., are worked in under pressure by suitable machinery. Formulas:

(1) Gum chicle .....1 pound.
Sugar .....2 pounds.
Glucose .....1 pound.
Caramel butter .....1 pound.

First mash and soften the gum at a gentle heat. Place the sugar and glucose in a small copper pan; add enough water to dissolve the sugar; set the mixture on a fire and cook to 244° F.; lift off the fire; add the caramel butter and lastly the gum; mix well into a smooth paste; roll out on a smooth marble, dusting with finely powdered sugar, run through sizing machine to the proper thickness, cut into strips, and again into thin slices.

(2) Chicle .....6 ounces.
Paraffin .....2 ounces.
Balsam of tolu .....2 drachms.
Balsam of Peru .....1 drachm.
Sugar .....20 ounces.
Glucose .....8 ounces.
Water .....6 ounces.
Flavoring, enough.

Triturate the chicle and balsam in water; take out and add the paraffin, first heated. Boil the sugar, glucose, and water together to what is known to confectioners as "crack" heat, pour the syrup over the oil slab, and turn into the gum mixture, which will make it tough and plastic. Add any desired flavor.

(3) Gum chicle .....122 parts.
Paraffin .....42 parts.
Balsam of tolu .....4 parts.
Sugar .....384 parts.
Water .....48 parts.

Dissolve the sugar in the water by the aid of heat and pour the resultant syrup on an oiled slab. Melt the gum, balsam, and paraffin together, and pour on top of the syrup, and work the whole up together.

(4) Gum chicle .....240 parts.
White wax .....64 parts.
Sugar .....640 parts.
Glucose .....128 parts.
Water .....192 parts.
Balsam of Peru .....4 parts.
Flavoring matter, enough.

Proceed as indicated in No. 2.

"Anti-Freeze" Solutions for Automobiles.

A. C. S. asks us to publish one or two formulas for non-freezing compounds to be used for automobiles. He wants a preparation that will not hurt the engine or cause it to corrode or rust.

On page 480 of the November, 1911, BULLETIN appeared a somewhat lengthy article on non-freezing solutions for automobiles. Inasmuch as the subject is one of unusual interest, and is likely to come up again this winter, we reprint the following from that issue:

Glycerin possesses certain characteristics which, to all appearances, would seem to make it an excellent non-freezing agent. It boils at an extremely high temperature and its freezing point can only be reached by artificial means. The cost is a consideration, however, as glycerin is exceedingly high and, unless commercially pure, is apt to contain fatty acids and produce destructive chemical action. It is conceded by leading authorities that it does destroy the rubber connections and after a short period becomes foul, thus necessitating frequent renewal.

Wood alcohol has been greatly favored for this line of work. In the presence of heat and oxygen, however, wood alcohol has a slight tendency to form formic acid, which might in time corrode the parts. It boils at a lower temperature than denatured alcohol, and consequently less of the latter is required, and as the tendency to evaporate is materially reduced, denatured alcohol is much cheaper to use for the purpose.

Alcohol (denatured) is the ordinary alcohol of commerce which has been made unfit for use as a beverage. It has absolutely no corrosive action on any of the metals with which it comes in contact, and its ability to withstand cold is indicated by the fact that it freezes at about —160° F. Its composition is necessarily uniform, because it is manufactured in accordance with a formula prescribed by and under the supervision of government chemists. It contains no solid matter, thus making it unnecessary to filter before using and eliminating all danger of its clogging the radiator.

20-per-cent solution freezes at about 10° above zero.
30-per-cent solution freezes at about 5° below zero.
40-per-cent solution freezes at about 20° below zero.
50-per-cent solution freezes at about 35° below zero.

Artificial Extract of Lemon.

C. N. H. writes: "Please publish a formula for making artificial extract of lemon. I have seen a recipe somewhat like this:

Citral .....1 ounce.
Oil of lemon .....15 ounces.
Cologne spirit .....3 gallons.
Water .....2 gallons.

"It seems impossible to filter this mixture unless we use pumice, and then the oil is filtered out. We have calls for this solution frequently and should be glad to have some information on the subject."

Let us state at the start that in marketing an artificial or imitation extract of lemon one must be very careful to observe the pure food laws.

The foregoing formula may be used as a working basis in the preparation of artificial extract of lemon, but we suggest that the quantity of the oil of lemon be reduced. Of course the trick in making an artificial extract of lemon lies in using citral, which imparts a lemon aroma to the solution. At the same time the use of citral makes it possible to dilute the alcohol with water as our correspondent has done. It will be noticed that there are three gallons of cologne spirits and two gallons of water in the foregoing formula.

Having reduced the amount of oil of lemon in this preparation the next precaution to be observed is pro-

longed agitation. The solution should be shaken for a long time before being filtered in order that as much of the oil as possible may go into solution.

Cheap Beef, Iron and Wine.

M. J. Z., realizing that wine of beef and iron of the National Formulary is expensive, asks for a formula of a cheap preparation.

The subject of a cheap beef, iron and wine is loaded. We have before us now a ruling of the Commissioner of Internal Revenue, Washington, D. C., dated August 23, 1912. It says:

"Special tax will be required for the manufacture and sale of beef, wine, and iron, unless it contains at least the percentages of beef and iron given in the formula on page 1821 of the nineteenth edition of the United States Dispensatory or is otherwise sufficiently medicated to be unsuitable for use as a beverage."

It is evident from the foregoing that you cannot make and sell a beef, iron and wine preparation below the N. F. standard unless you take out a rectifier's license.

If, however, you still desire to prepare a cheap beef, iron and wine, we suggest the following formula borrowed from the literature. It will be necessary to state the percentage of alcohol on the label:

Beef peptone	128 grains.
Tincture of iron citrochloride	1 fluidounce.
Water, warm	2 fluidounces.
Simple syrup	2 fluidounces.
Simple elixir	2 fluidounces.
Sherry or other suitable wine	25 fluidounces.

Dissolve the peptone in the warm water, add the other ingredients, and filter. Beef peptone is commercially available.

It would appear in the light of the ruling of the Internal Revenue Department that even if you state on the label the percentage of beef peptone and of tincture of iron citrochloride, you will not be free to make and sell the preparation without a rectifier's license.

Chilblain Remedies.

E. M. S. wants a formula for a chilblain remedy. During the winter there are frequent calls for such a preparation.

C. K. Bushey of Dillsburg, Pa., some time ago contributed the formula of a chilblain remedy to the BULLETIN that has since been incorporated in our book "350 Dollar Ideas for Druggists." Mr. Bushey says that the preparation gives almost instant relief. It consists of equal parts of balsam copaiba and chloroform. Apply to the affected area. If put up in a package of reasonable size, it sells for 25 cents.

The following formula yields a liniment that relieves chilblains:

Camphor	2 drachms.
Cantharides	2 drachms.
Mustard	½ ounce.
Oil of cajuput	1 ounce.
Oil of rosemary	3 drachms.
Alkanet	2 drachms.
Oil of turpentine	10 ounces.

Macerate ten days and filter. Rub in night and morning. Do not use on a broken surface.

Collodion compounds are also used to relieve frostbite. A BULLETIN correspondent reports considerable success with the sale of compound salicylated collodion for the purpose.

Board-of-Pharmacy Secretaries in the United States.

F. R. W.—Here is the full list:

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Texas—R. H. Walker, Gonzales.
Utah—W. H. Dayton, Salt Lake.
Vermont—D. F. Davis, Barre.
Virginia—T. A. Miller, Richmond.
Washington—James Lee, Seattle.
West Virginia—Alfred Walker, Sutton.
Wisconsin—Edward Williams, Madison.
Wyoming—C. B. Gunnel, Evanston.

Liquid Face Rouge.

H. C. S. asks us to publish a formula of a liquid face rouge.

Here is a formula suggested by Dr. Max Joseph in his "Short Handbook of Cosmetics." It is known as Fluid Red Paint (Débay's Rose Liquide):

Potassium oxalate	7 grains.
Distilled water	8 ounces.
Alcohol	4 drachms.
Carmine	7 grains.
Ammonia water	8½ grains.

Here are two other formulas borrowed from The New Standard Formulary:

(1)

Carmine	1 drachm.
Ammonia water	6 fluidrachms.
Water	7 fluidounces.
Spirit of rose	2 fluidrachms.

Mix, set aside 24 hours or longer if necessary, agitating frequently till the ammonia has evaporated, then filter.

(2)

Eosin	24 grains.
Water	3 fluidrachms.
Glycerin	1 fluidrachm.
Alcohol	4½ fluidounces.
Cologne water	3 fluidounces.

Mix and dissolve.

Making Castor Oil Red.

F. J. A. wants a coloring agent for the preparation of ruby castor oil. Use "oil red soluble" to color the castor oil. This coloring agent can be obtained from Theodore H. Eaton & Son of Detroit, or from other dye houses.

W. F. P.—We are unable to tell you the composition of the proprietary preparation which you mention.

The Bulletin of Pharmacy

A LIVE MAGAZINE FOR DRUGGISTS

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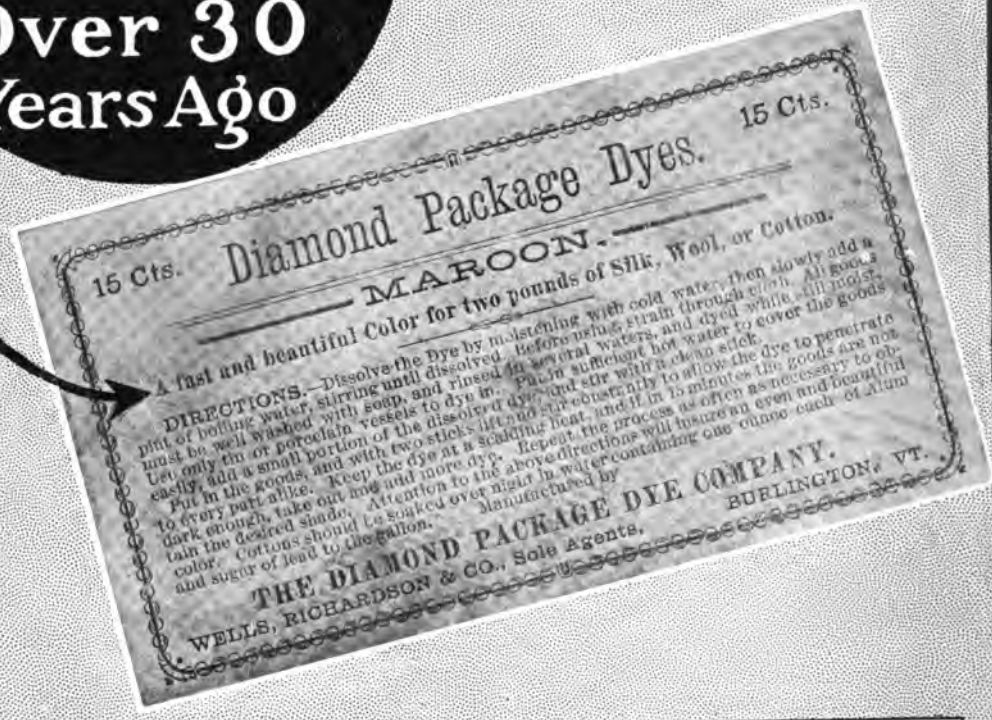
We Tried The One Package Dye Theory Over 30 Years Ago

We show here a photographic reproduction of a package of Diamond Dyes over 30 years old when we were trying the "one package dye" theory.



How We Learned the Truth

Over 30 years ago we began selling Diamond Dyes to the trade on the mistaken theory that one kind of dye would color Wool, Silk or Cotton equally well.

We tried this about 9 years then we learned the truth.

We found that all great textile dyers—dye chemists and dye experts, had learned that Wool and Silk take dye differently from Cotton and other Vegetable Fibres.

We didn't dodge the truth.

We withdrew our mistaken theory efforts and put out Diamond Dyes properly, scientifically, and truthfully in each color in 2 different packages—one suited to Wool or Silk, one suited to Cotton, Linen or Mixed Goods.

Today—30 years later we constantly receive letters from disappointed women who have been misled into trying one package theory dyes just as we deceived them ourselves before we learned and told the truth about Dyes.

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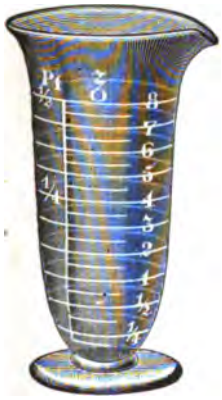

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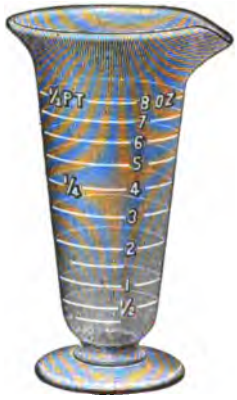

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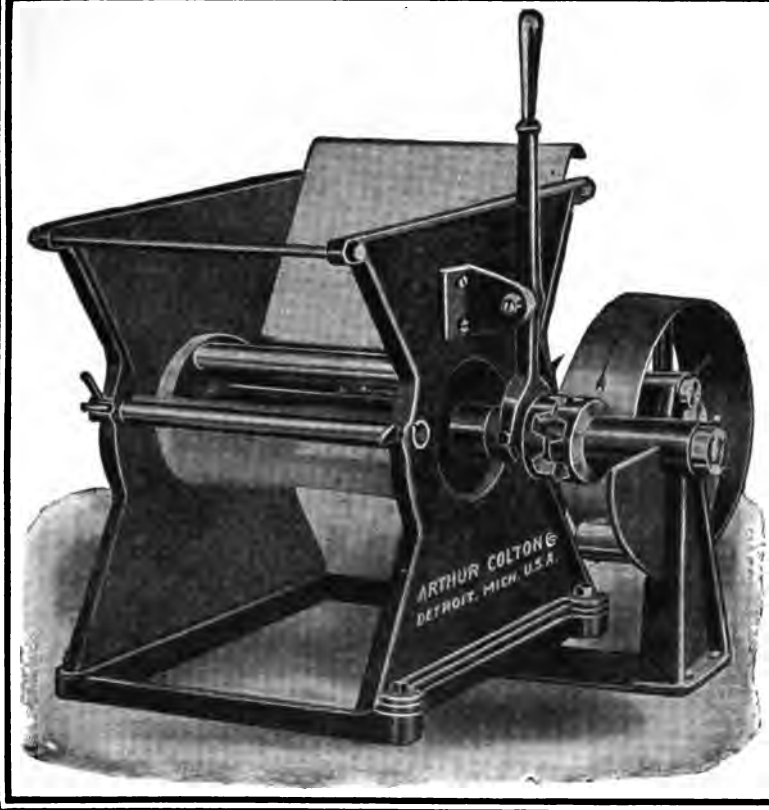

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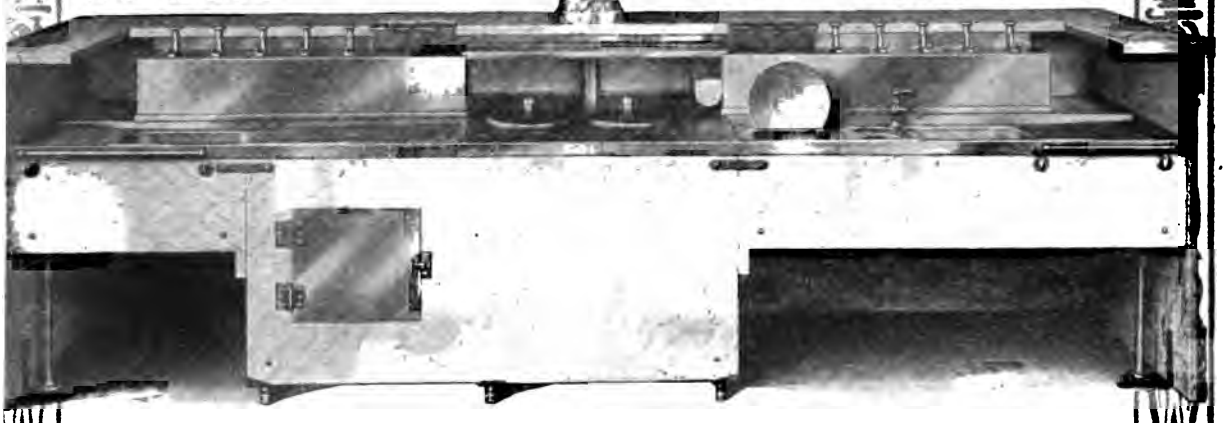

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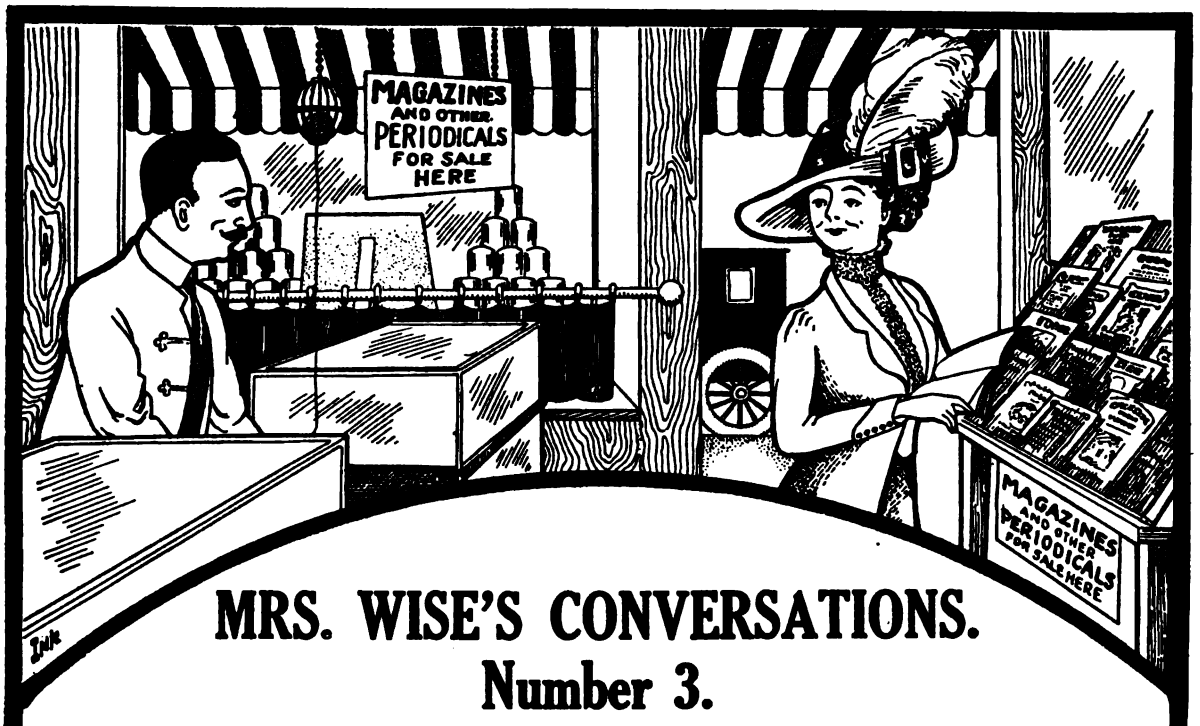

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Number 3.

MRS. WISE: Oh, here are the Christmas numbers of the **magazines**! Aren't they pretty?

DRUGGIST: Yes, the Christmas numbers are indeed handsome—and they sell quickly, too!

MRS. WISE: Of course they do! I'll take some along for myself and my friends. They make nice little Christmas remembrances.

DRUGGIST: Help yourself; I'll take the money out of this bill which you gave me for the prescription.

MRS. WISE: That's easy, isn't it? I help myself and *you take the money!*

DRUGGIST: You're right. It doesn't require any effort to sell **magazines** and **periodicals.** Everyone does their own selecting—and then we don't have to use ten cents' worth of paper and twine to wrap the purchase.

MRS. WISE: And you don't have to deliver it, either.

DRUGGIST: No. No one minds carrying a good looking **magazine.**

MRS. WISE: It seems to me that **magazines** sell themselves.

DRUGGIST: They do. It requires no clerks to show, explain and sell them and I believe I can take the money as fast as it is handed to me!

MRS. WISE: Ha! Ha! No doubt! I don't see why all druggists don't sell **magazines** and other **periodicals.**

DRUGGIST: They would if they knew how easily they could be handled without extra work, bother or worry.

MRS. WISE: If I were a druggist I'd begin right now with the quick-selling Christmas numbers!

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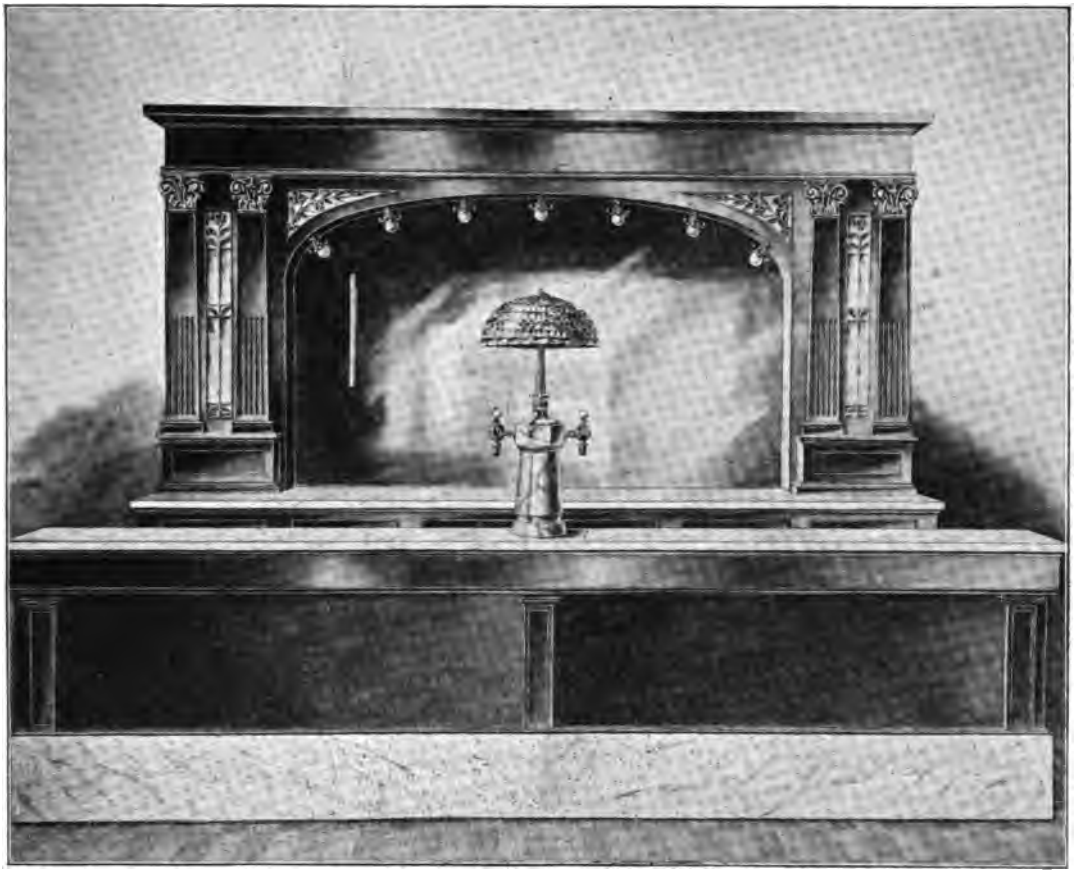

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"As to how I like the Fountain, I want to say that I like it very much and it has been a money-maker for me. My ice bill up to this time last year was about $60.00, and for the same length of time this year, with my new Acorn Fountain, my ice bill is only about $20.00. I think that is good interest on my money. My business has grown from two and three dollars a day to an average of eight dollars a day. I guess that is some increase.

"I am very well satisfied with my fountain and I think whoever buys an Acorn Soda Fountain will make no mistake."

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State.....

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Branches: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Minneapolis, Seattle, U.S.A.; London, Eng.; Montreal, Que.; Sydney, N.S.W.; St. Petersburg, Russia; Bombay, India; Tokio, Japan; Buenos Aires, Argentina.

System Systematized--Simplicity in the Superlative.

Being the Reduction to a Science of the Present-Day Interpretation of System. The Elimination of the Cumbersome Apparatus. The Embodiment of a Complete and Perfect Method of Keeping Accounts, Insuring an Absolute Check Upon Every Phase of the Commercial Transaction Between Seller and Buyer—and all Between the two Covers of a Single Loose Leaf Book.

By JAMES BARKER, Sales Mgr. The Richmond & Backus Co.

Simplicity is one thing, and System quite another. There are a number of "Systems," so called, upon the market, whose usefulness has been curtailed or destroyed entirely by their too great effort at comprehensiveness. There may have been a time when these systems were time savers, but with the extension of the business their makers seem to have attempted to stretch their usefulness over too great a number of operations, with the result that they are confusing in their complexity, and, instead of simplifying matters for the user, they succeed only in leading him through a maze of complicated operations that are not only laborious, but mystifying in the extreme.

The comparatively compact register-apparatus originally devised by some of them has assumed the proportions of a desk, and it continues to grow.

In the effort to perform a multitude of functions, more or less helpful but not necessary, simplicity is sacrificed and a "red tape" system has taken its place.

Why the cabinet appurtenances? Even the old-time method of bookkeeping wasn't surrounded by the endless detail and cumbersome trappings of these so-called systems. It may not be a misnomer to call them systems, but the name does not necessarily signify simplicity, and simplicity is what they imply to the uninitiated.

Reduced to the plain proposition of efficiency and economy, the Modern Ledger-Statement System of The Richmond & Backus Co., of Detroit, Mich., more nearly attains absolute perfection than anything else made in this country. Moreover, its makers are manufacturing stationers who have spent a lifetime in the art of reducing business methods to system—system in the sense that means the reduction of labor, time and expense—system that eliminates fixture accessories and reduces your bookkeeping to perfection within the covers of a single loose-leaf book. "Simplicity in the superlative degree!"

This system, which is familiarly known to users as the "Are and Be," is not new. It has gone through the crucible of experimentation and earned the enthusiastic commendation of thousands of users, among druggists and other merchants, throughout the country.

We present the **"Are and Be"** System in our accompanying illustration. The right-hand page is backed by a duplicate sheet, upon which is recorded a carbon copy of all journal entries made during the month. At the end of the month the original, presenting a complete itemized bill of all purchases, is mailed to your customers, and the carbon copy underneath is retained as your record of the same. The total amount shown on this duplicate sheet is then posted as a debit to the ledger leaf at the left, with a corresponding credit-posting to the sales or merchandise account. A binder goes with the outfit for filing duplicates in, thus enabling you to keep a complete record of all business done, item for item.

The **"Are and Be"** Combined Detachable Leaf Ledger-Journal and Monthly Statement Book Special Outfit is now offered to the trade at the special outfit price of $18.75, until further notice. It consists of the following:

SPECIAL OUTFIT

1 Sectional Post Binder, Corduroy and Russia, size 9½x10, marked as desired	$6.00
300 B. H. 64 Ledger Leaves made of our famous Bond Hinge Paper	4.50
1 M Statements in duplicate, printed to your order	9.50
1 set No. 27 Gold Embossed Alphabetical Tabs attached to plain ruled sheets	1.00
1 Carbon Holder	.25
50 Sheets Carbon Paper	1.50
1 Binder for filing duplicate	1.75
TOTAL REGULAR PRICE	$24.50

Special Outfit Price, $18.75

SENT FREIGHT PAID ON RECEIPT OF PRICE
To All Points East of Mississippi River.

It is especially adapted to the needs of the druggist who has little time for the laborious work of preparing monthly statements. An operation at the time of your sale records your charge, and makes your duplicate record.

It represents System, Service, and Simplicity, and is a valuable contribution to progress in the keeping of all kinds of accounts.

NEW YORK AGENCY, 706 COLUMBIA BLDG., 29 BROADWAY.
CLEVELAND, 822 CITIZENS' BLDG.

Stop the Leaks

THE PHYSICIAN'S PERFECT CALL LIST

AND RECORD

is a veritable boon to the practitioner of medicine. It provides a simple, efficient method of bookkeeping. It saves time. It prevents losses.

With the ordinary system (or lack of system) the physician trusts too much to memory. As a result many little accounts are entirely forgotten. In the course of a year they amount to a handsome sum. With the **Perfect Call List** he takes care of each item when it is fresh in mind. *He nails it on the spot.*

A CAPITAL PRESENT FOR THE DOCTOR

The **Call List** is an admirable gift for your physician friends—a book which will be consulted many times every day and which will serve as a constant reminder of your store.

Every year we receive thousands of orders from druggists for copies of the **Call List** for presentation to their medical patrons. We would like to have *your* order. The cost is small and will be returned to you many times in increased prescription business.

PRICE TO THE TRADE, $1.50 EACH, LESS 25 PER CENT

Morocco bound, full gilt edges. Name of the physician, "Compliments of" and name of the druggist (or his pharmacy) embossed in gold free of charge.

LET US HAVE YOUR ORDER NOW!

E. C. SWIFT, Publisher

Box 484, DETROIT, MICH.

European Office: 19 and 20 Great Pulteney St., W., LONDON.

Better Drug Advertising For One Dollar a Month

You Can Not Buy Service Like Ours Elsewhere at Any Price

The aid it gives involves more than advertising. It covers everything that can help to build or hold business. No other business-building service has ever proved so important to enterprising druggists. It has increased the sales of thousands of druggists throughout the world, and it can increase yours too—at the small cost mentioned above.

We have been furnishing Drug Advertising Service for more than twenty years, and our satisfied clients everywhere are our strongest testimonial of superior service.

THE MANNING MONTHLY SERVICE

Is open to but one firm in a locality, and the opportunity to secure the definite and certain aid it provides may never come to you again.

The Service contains from forty to sixty fresh, seasonable ads covering all topics, suitable for the current month, matter for booklets, circulars, etc., form letters, suggestions for window displays, and articles on business building.

It costs you nothing to find out more about the Service, so fill in the coupon and return to us at once. On receipt of same, our booklet, "The Art of Building a Drug Business," containing detailed information about the Service, will be sent you by return mail.

The Manning Advertising Service

ED. McCULLOUGH, Manager

St. Louis, Missouri, U. S. A.

MANNING ADVERTISING SERVICE
313 NORTH NINTH STREET
ST. LOUIS, MO.

Please send me your booklet, "The Art of Building a Drug Business." After examining it, I shall advise you as to whether I want to reserve the exclusive use of your Service for this locality.

Name.....

City.....

State.....

B. P.

A thorough Correspondence Course in the best known Optical College in the world for only $15.00.

When we say that the South Bend College of Optics is the best known optical college in the world we are stating a real truth.

We have a larger number of graduates in the field than any two other colleges combined.

Our students are in every State and Territory in the United States; in every province of Canada; in Mexico, Central America, West Indies, South America, Europe, Asia, Africa, Australia, New Zealand and Hawaii, Bermuda and the Fiji Islands.

We have testimonial letters in praise of our system from all of these States and Provinces and Countries.

We have letters from prominent oculists and medical professors saying our correspondence course is the most thorough of any they have ever seen.

Several thousand students have paid us $25.00 for the same course that you can now secure for only fifteen dollars.

When the leading oculists and opticians all over the world endorse our system —men whose testimony could not be bought at any price—you will surely take no chance in enrolling with us. We simply offer you the best that is to be had in optical instruction.

We would like to send you free our 64-page prospectus which tells all about our course of study and contains the names and addresses of scores of our students and what they say of us.

It tells why we can afford to give you this course at less than two-thirds of the regular price.

It will only take you a minute to write us a postal and it will bring full particulars by return mail.

The South Bend College of Optics (Chartered)

ESTABLISHED 1893.

Suite 4, Kamm Building **South Bend, Indiana, U. S. A.**

THE BANGS' "PURITAN" TYPE OF DRUG STORE EQUIPMENT.

In days gone by, the town crier, with his bell and bellowing, let all within reach of his voice know the news or told where wonderful bargains might be had and money saved, or spread the tidings of some important meeting or other public affair.

But while that primitive form of advertising served quite well for those earlier days, it would scarcely meet the demands of the present time, but still the problem of proper publicity demands a satisfactory solution, and so very much depends on the manner of its solving.

For such druggists as are so fortunately situated financially as to be able to use the medium of the public press liberally, and who can write forceful, attention-compelling copy for space occupied, or if not competent to do this, can afford to hire it done, one of the factors of the vexing advertising problem has been eliminated.

But the druggists who can avail themselves of the advertising force of the daily papers, in a measure liberal enough and a manner attractive enough to make their investment in this form of publicity pay good enough dividends, are very much in the minority, and what is true of this method is equally true of many other forms of advertising.

And even if you are so situated as to be able to avail yourself of this method successfully, it only takes care of but one factor in the problem.

Your store itself must still be the solid bed-rock on which you have to rear your structure of favorable publicity. What would it profit you to advertise to your public that you were prepared to give the

best in goods and service the world affords if the appearance of your store and its attendants do not look as if you could make good? It is not enough alone to have quality, you must have every appearance of quality as well. This is a fact not to be gainsaid. It has been demonstrated and proven thousands of times and under about every conceivable condition.

This, then, brings us to the pith of the matter; since the store is the foundation from which all advertising must necessarily be built, it is but logical that you should have it substantial and right in every way. See that it is handsome, dignified, attractive. Insist that it be well lighted and kept spotlessly clean and be sure that it is so arranged that your merchandise is most effectively displayed. Keep well in mind, too, that goods well shown are half sold. Remember this, that a fine appearance speaks to the eye, a language understood and appreciated by everybody, and that the impression your customers get of your store, whether favorable or otherwise, largely determines your success or failure.

As a permanent, forcible, economical, 100% efficient advertisement we have never found anything to equal a fine-appearing, properly-equipped store, and we have been diligently searching for thirty years

The small investment needful to install the "Puritan" equipment makes it no longer necessary for any druggist to have a cheap-appearing, poorly-equipped store. The interest charge on the equipment shown in the cut cost the druggist owning this store but forty cents per day.

We suggest that you try the "Bangs" method and see how easy it is to become prosperous when your store has every appearance of prosperity.

Write to-day for details. Yours for better business,

C. H. BANGS DRUGGISTS' FIXTURE COMPANY, BOSTON, MASS.

Products that every pharmacist should be prepared to dispense.

HERE is a group of scientific medicinal preparations—products of merit and reputation—products that are seasonable; that are prescribed or administered by the most advanced physicians in the world. We are promoting them now among the entire medical profession of America.

PITUITRIN: One of the most notable of recent additions to the materia medica. Of inestimable value in difficult childbirth. As a corrective of uterine inertia it is believed to be without a rival.

Glaseptic ampoules of 1 Cc. (12 ampoules in a package); also ounce vials.

BACTERIAL VACCINES: Fifteen high-class scientific products, which are coming into general use by physicians and which we are able to supply at very moderate prices. A complete list will be sent to any pharmacist on receipt of request.

Graduated syringe containers and rubber-stoppered glass bulbs.

PHYLACOGENS: A group of medicinal agents that are attracting marked attention throughout the medical world. Four products now ready: Rheumatism Phylacogen, Gonorrheal Phylacogen, Erysipelas Phylacogen and Mixed Infection Phylacogen.

Sealed glass vials of 10 Cc. each.

CONCENTRATED ANTIDIPHTHERIC SERUM (Globulin)

Antitoxin that is in universal demand by the medical profession. Salable wherever diphtheria prevails. As staple in its season as any food product.

Syringe containers of 500, 1000, 2000, 3000, 4000, 5000, 7500 and 10,000 units.

SYRUP COCILLANA COMPOUND: "The prescriber's cough syrup." Efficient, palatable, elegant. The most widely prescribed cough syrup in the world. A steady seller throughout the season of coughs and colds.

Pint, 5-pint and gallon bottles.

◆ ◆ ◆

These products should be in every retail pharmacy. If they are not in your pharmacy you are undoubtedly missing a lot of good business.

Home Offices and Laboratories,
Detroit, Michigan.

PARKE, DAVIS & CO.

Pride, Fear or Business ?

Which Dictates to You

Is it pride, precedence, prejudice, or fear that dictates to you? The business man who is dictated to by any of these does not travel very far on the highway to success. The aggressive druggist is one who listens to the dictates of business. He strikes out boldly, he knows what he wants and goes after it. We are serving thousands of hustling aggressive druggists who do not let pride, fear, precedence, or prejudice dictate to them. They want more business, they are determined to get more business, they go after more business by using

M. P. Gould Company's System

This service goes to them regularly every month. In our SYSTEM they find new ways, methods, plans, and ideas for getting business. Advertising copy for all conceivable forms of advertising, window displays, illustrated and described. We give these druggists special help with their own individual problems. We give them special help in marketing their own preparations. All of our years of experience in building profit paying drug stores and all of the power of our big office force are right back of these druggists for their exclusive use in their locality. Strike out for more business yourself. Sign the coupon herewith. It costs nothing to find out more about our SYSTEM of Advertising for Retail Drug Stores; besides, we will serve you one month free should you choose to order. We serve only one druggist in a locality—First come, first served.

M. P. Gould Company

International Drug Store Advertisers

31 East 22nd Street, NEW YORK

B.P. 12-12

ONE MONTH FREE

Send me full particulars relative to your SYSTEM of Advertising for $2.00 per month. It is understood that this inquiry places me under no obligation, but should I choose to order, you will serve me One Month Free.

Name.....

Address.....

"What dentifrice do you recommend?"
The question has a familiar ring, hasn't it?
Most pharmacists have it propounded to them often enough.
Always say **Euthymol** dentifrices. You will make no mistake if you do.

Euthymol Tooth Paste. Euthymol Tooth Powder. Euthymol Liquid Dentifrice.

Euthymol tooth preparations are efficacious detergents. They are antiseptic. They are free from harmful substances. They are pleasant to the palate. They meet every demand for an efficient dentifrice.

Keep them on the show-case. You will find them ready sellers.

Home Offices and Laboratories,
Detroit, Michigan.

PARKE, DAVIS & CO.

A Time-Saver For Druggists

The L. C. Smith & Bros. Label Platen

THE L. C. SMITH & BROS. TYPEWRITER CO. has a platen equipped with a device for writing small labels or stickers. Druggists, physicians and others who have work of this character will find this arrangement an effective time-saver. A machine which has this platen is also used for general correspondence.

The L. C. Smith & Bros. Typewriter is the ideal machine for all kinds of work that can be done on a typewriter. It is ball bearing at all frictional points and its keyboard is so arranged that all operations, even to shifting the ribbon, are controlled from it.

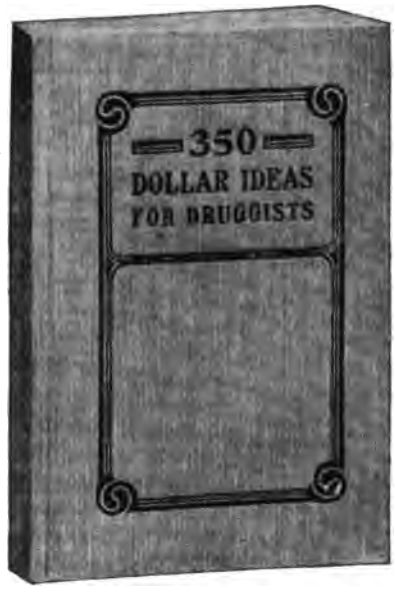
For further information and literature, write the

L. C. SMITH & BROS. TYPEWRITER CO.

SYRACUSE, N. Y., U. S. A.

BRANCHES IN ALL PRINCIPAL CITIES.

350 Dollar Ideas for One Dollar!



In this series of ads. we have recently been repeating what people have said about our new book—"350 Dollar Ideas for Druggists."

We have quoted the exceedingly complimentary opinions of some of the purchasers of the book. We have reprinted a few of the reviews which have appeared in the pharmaceutical journals.

All of these comments on the book have, without exception, testified to its great value and usefulness to every druggist. Aren't you convinced yet that you need this book in your business?

Listen now: *there never was a book yet gotten out for the retail druggist which for practical, money-making,. money-saving value could approach this one!* That's a strong statement, but we stand by it!

The book represents the boiled-down cleverness of 350 druggists. It describes the plans and schemes which these druggists have conceived for the better and more profitable conduct of their business.

We paid $350.00 for these suggestions—you get them for $1.00.

Can you beat it?

Sent for $1.00 post-paid.

E. G. SWIFT, Publisher, - Detroit, Mich.

If you stop to think, you will recognize the fact that wherever electricity has solved any problem, it has done so better than any other form of power.

Electric delivery is the logical delivery for city use, which requires many stops, just as naturally as electric street railways, electric elevated railways and electric locomotives for steam railway terminals are superseding all other forms of locomotion under similar conditions.

Detroit Electric Commercial Vehicles "get away" *Instantly* in congested traffic. All speeds are controlled by one lever. An ordinary driver can learn to operate a Detroit Electric in a few hours. There is no complex mechanism to be put out of order by abuse or carelessness. When the car stops, the power stops and the expense for power.

Detroit Electric Commercial Vehicles are noiseless, odorless, trim in appearance and are particularly appreciated by customers in all residential districts. They are admitted at all wharves and freight terminals. Fire hazard is reduced to the minimum. All body space is available, except the driver's seat. They occupy only their own space in a garage.

Detroit Electric Commercial Vehicles are used in sixty (60) lines of business in fifty-six (56) of the largest foreign and American cities.

Detroit Electric Commercial Vehicles are built exclusively for the Edison nickel and steel battery. This battery of itself is about 300 pounds lighter in a Detroit Electric Commercial Vehicle than a lead battery equipment. This admits of an all metal chassis and lighter construction throughout the car. Lighter weight means more mileage, less wear on bearings and tires, and less cost for power to move the car and its load.

48-page illustrated catalogue with full information will be sent on request. Specific information regarding your individual requirements will be gladly furnished.

ANDERSON ELECTRIC CAR COMPANY,

421 Clay Avenue, Detroit, U. S. A.

BRANCHES:

Boston
Brooklyn
Buffalo

New York, Broadway at 80th St.
Chicago, 2416 Michigan Ave.

Cleveland
Minneapolis
Kansas City

Selling representatives in most leading cities.

A NEW BOOK:

"Board Questions Answered"

This book will prove invaluable to every candidate who desires to "freshen up" before taking the board-of-pharmacy examination. **Complete sets of examination papers actually used by the boards of pharmacy in the leading States are printed, and answers to all the questions are given with care and thoroughness.**

Even the graduate in pharmacy who wants to go before the State board finds himself confronted with two necessities. In the first place, he must refresh his memory of a thousand and one things. In the second place, he must get something of an idea of the type and class of questions asked by the particular board which is to examine him. This is true no matter how thorough an education he may have had.

And the same thing is true also, in even added measure, of a clerk who has been studying pharmacy at home, or who has perhaps taken one of the several correspondence courses. Regardless of how well he has studied in the past, he must make particular preparation for the board examination if he expects and desires to be successful.

This new book of "Board Questions Answered" is especially published for this very purpose. It will enable the candidate to brush up his knowledge on the one hand. On the other, it will show him in a general way what sort of questions he will be asked when he gets in the examination room.

Every one of the examination papers is complete in itself. Every last question asked by the board on the occasion represented is printed and answered. Not even catch questions have been dodged.

The book is handsomely and strongly bound in cloth, is well printed, and costs $1.50.

Better order a copy to-day if you contemplate going before your State board.

E. G. SWIFT, Publisher, - - Detroit, Mich.

THE SCRAP BOOK.

USE the "Star Quizzer" and pass any State examination. It covers the questions and answers of State Pharmacy examinations. The revised edition, conforming to the new U. S. P., will be sent post-paid for $1.25. Address Stevens & Mallory, Ada, Ohio.—*Adv.*

ANOTHER REFORMER.—"Yes, I've cut out the slang stuff," Nell was telling her latest "gentleman friend." "Gee, but my talk was gettin' fierce! I'd worked up a line o' fable-material that had George Ade backed off the map and gaspin' for wind, but I've ditched all that now. I seen it was up to me to switch onto another track. Jammed on my emergency brakes one day and says to myself, 'You mutt, where do you think you'll wind up if you don't slough this rough guff you're shoving across on your unprotected friends? You never will land a Johnny-boy that's got enough gray matter in his cupola to want a real, bang-up flossy lady for his kiddo instead of a skirt that palavers like a brainstorm with a busted steerin'-gear.' Any girl can talk like a lady, even if she never gets closer to one than to stretch her neck when some swell dame buzzes past in her gas-wagon. I says to yours truly, 'It's time to reformate your grammar, little sister,' and you betcher sweet life I've cut the mustard."—*Lippincott's.*

THE standard of purity and uniformity maintained in the mercurial preparations manufactured by Chas. Pfizer & Co. has given their brand an enviable reputation among the trade generally, and more particularly among manufacturing pharmacists.—*Adv.*

"WHEN does your husband find time to do all his reading?"

"Usually when I want to tell him something important."—*Detroit Free Press.*

STELLA: "Are they in love?"

Bella: "They must be; she listens to him describe a ball game and he listens to her describe a gown."—*Brooklyn Life.*

KNICKER: "Do you understand mortgages?"

Bocker: "Yes; the first is for the car and the second is for the upkeep."—*New York Sun.*

GETTING ready for the state board examination? You will find it profitable to secure a copy of "How to Get Registered." It outlines a full course of study which you can take at home or in the store. It gives you a thorough preparation. Send 50 cents for a copy to Charles L. Mason, North Granville, N. Y.—*Adv.*

Antiphlogistine

Trade Mark

"It Sells Itself,"

but the druggist can show his salesmanship by directing attention to the four different sizes and helping his customer to select the most suitable size for his particular needs.

Small	**contains**	**10 1-2**	**oz.**	**net.**
Medium	"	**17 1-2**	"	"
Large	"	**34 1-2**	"	"
Hospital Size	"	**5**	**lbs.**	"

THE DENVER CHEMICAL MFG. CO.

NEW YORK.

Get the Quantity Discounts on

PINEX

The big-selling cough remedy.

You'll probably sell 6 dozen Pinex—perhaps 12 dozen—this year. Buy a quantity and increase your profit.

Discount on 6 dozen order, 5%; on 12 dozen, 8%. Through your jobber.

Bigger Than Ever.

Pinex is being advertised more heavily, and is selling faster, than ever before. People who always made their own cough remedy are now buying Pinex, getting a better article and paying the druggist a better profit. One of the best money-makers a druggist ever touched. The **sale is guaranteed.** Stock it up! Get the discounts!

The Pinex Co., Ft. Wayne, Ind.

Send For Our

NEW CATALOG "A"

(Superseding previous issues)

Illustrating and describing the most complete line of

DECORATED TIN BOXES

for dispensing purposes ever offered

THE RETAIL DRUG TRADE

Boxes for every requirement of the Modern Drug Store.

A complete supply of all styles and kinds kept in stock.

American Stopper Company,

Dwight and Verona Streets, - - BROOKLYN, N. Y.

MAGISTRATE (*about to commit for trial*): You certainly effected the robbery in a remarkably ingenious way; in fact, with quite exceptional cunning.

Prisoner: Now, yer honor, no flattery, please; no flattery, I begs yer.—*London Sketch.*

THE BROAD VIEW.—It requires more than a narrow restricted vision to see the value of a beautiful store. It takes a broad knowledge of human nature, a realization that trade gravitates naturally to agreeable places. Bangs saw that years ago and began to make his observation plain to the druggists of this country. He started a campaign of beautifying pharmacies. To-day every place of any importance in the United States bears monuments to Bangs's genius. And many a druggist carries a nice fat purse that he owes in a large measure to a beautiful store furnished by Bangs. If you intend to remodel your pharmacy or build a new one, be sure to get the services of the well-known Boston house, the C. H. Bangs Druggists' Fixture Co.

LITTLE ELLA'S father was an eminent author, and one day while he was at luncheon the little girl occupied a chair in his study. Shortly a caller was ushered in, and with a pleasant smile inquired:

"I suppose you assist your father in entertaining bores?"

"Yes, sir," replied Ella, gravely; "please be seated."—*Harper's Bazar.*

THE husband and wife were making a call on friends one evening. The wife was talking. "I think we shall have Marian take a domestic science course along with her music and regular studies when at college."

"Ah," said a man present, who had been a stranger until that evening, "you look rather young to have a daughter win at college."

"Oh," said the mother naively, "she isn't old enough now; she is just eight months old, but I do so like to look forward!"—*Indianapolis News.*

MAKING THE SALE EASIER.—With the huge multiplication of commodities for which sale is sought through the modern drug store, and the ever-growing list of items the buying public expects the druggist to supply, there is only occasionally any evidence of an effort to make the merchandising of these wares easier for the store's proprietor. Stress of competition, ambition for progress, commit him to an always rising outlay for fixtures, accessories, and the shoal of advertising and selling aids incidental to twentieth century retailing; but except in comparatively few instances, the makers of many of the things he sells and is asked to sell do not seem to rate the druggist as the vitally important (and normally not overpaid) engine of distribution he actually is. Many manufacturers of commodities which druggists sell look on their connection with the trade as one which favors the trade more than it does the maker—as if the druggist had to sell their goods willy-nilly! By way of contrast, there are others who seek,

PLAIN OR LITHOGRAPHED
TIN CANS AND BOXES.

All Standard Styles and Sizes for the Drug, Aniline Color, Paint, Varnish, Dry Color, Oil, or Baking Powder Trade.

Five-Gallon Oblong Flat Can cased singly—also made with Screw Opening.

Oblong Paneled Varnish Cans with Nozzle opening or with 1¼-inch screw if desired.

Five-Gallon Square, Round Corner Can fitted with 1-inch Man Seal Screw

WE MAKE A COMPLETE LINE OF HIGH-GRADE FRICTION TOP CANS.

National Can Company, Independent Manufacturers. **Detroit, Mich.**

WRITE FOR ILLUSTRATED CATALOG.

and seek ably, to help the drug store sell what they sell the druggist; and the Pabst Brewing Company of Milwaukee is a conspicuous figure among these.

In all the advertising done for Pabst Extract, The "Best" Tonic, the druggist is featured. The reader is told to go to his druggist for The "Best" Tonic; the doctor, to specify it in his prescription. Every effort is made to render selling easy, and to show the consumer the sense and gain there is for him in ordering Pabst Extract by the dozen instead of by the single bottle. Naturally such an order is to the druggist's gain as well, and that in more ways than one. All through the Pabst Extract advertising it is most apparent that these manufacturers realize the value of the druggist's co-operation, and they testify to that value by using every capable means to help him sell their goods, and to make that selling as easy as it possibly can be.

REAL ESTATE MAN: And what a place for a bungalow!—primeval forest, virgin wilderness, absolute seclusion.

Jones: Yes, but that's just the kind of a place that everybody hunts up!

FIX UP YOUR WINDOWS.—This is a delightful season. People are promenading on the streets and your windows will come in for a good share of attention. Make the most of the chance. Arrange a few nice trims that will attract passers-by. You will find any number described and illustrated in a book, "Window Displays for Druggists." Every druggist should have a copy of this useful work. It costs only $1.00 and may be had postpaid by remitting that sum to E. G. Swift, Publisher, Detroit, Mich.

THE court was having trouble getting a satisfactory jury.

"Is there any reason why you could not pass impartially on the evidence for and against the prisoner?" asked the judge of a prospective juror.

"Yes," was the reply; "the very looks of that man makes me think he is guilty."

"Why, man," exclaimed the judge, "that's the prosecuting attorney!"—*Ladies' Home Journal.*

CHARLES REYNOLDS, druggist, of Plymouth, Indiana, C. Bonham, manager of the Public Drug Co., Bluffton, Indiana, and E. F. Guthrie of Logansport, Indiana, all visited the Walrus Manufacturing Co.'s plant at Decatur, Illinois, Thursday, October 31, where each purchased a very handsome Walrus soda fountain. The outfits bought by Mr. Reynolds and Mr. Bonham are to be made entirely of white glass. These fountains were sold through the Fort Wayne Drug Co., Walrus agency, Mr. A. W. Rose and Mr. J. Slutz accompanying these gentlemen to the Walrus factory.

BIND YOUR "BULLETINS"

DO IT YOURSELF.

Get a "Bulletin Binder." We supply it. One binder holds twelve numbers—takes care of a whole year's issues—protects them—keeps them in handy form for ready reference: by aid of the index, which you insert at the rear of the volume, you can find what you want when you want it.

The binder is made of strong boards, cloth covered, with reinforced back. It is exceptionally durable—in fact, will last a lifetime. On its back, in gilt letters, appears the title "THE BULLETIN OF PHARMACY." The journals are held securely in place by means of a stout cord.

Binding your BULLETINS is child's play. Punch two holes in each number to be bound. Run the cord through and fasten it. Anybody can do it.

The Binder, Post-Paid, 65 Cents.

(Actual cost to us.)

If you value your BULLETIN—and of course you do—it is extravagance to be without a "Bulletin Binder;" so send along your order.

Detroit, Michigan. **THE BULLETIN OF PHARMACY.**

IN Concord, New Hampshire, they tell of an old chap who made his wife keep a cash account. Each week he would go over it, growling and grumbling. On one such occasion he delivered himself of the following:

"Look here, Sarah; mustard-plasters, fifty cents; three teeth extracted, two dollars! There's two dollars and a half in one week spent for your own private pleasure. Do you think I am made of money?"—*Lippincott's.*

"HELPFUL HINTS FOR THE BUSY DOCTOR" is a little journal published by The Abbott Alkaloidal Company, of Chicago. You can obtain it regularly by asking the Abbott Company to put your name on its mailing list.

"So you refuse to buy my car, do you?" said Whibley.

"I certainly do, Whib," said Hinkley. "When I want a car like yours I'll go to the five-and-ten-cent store and get a new one."—*Harper's Weekly.*

THE Oakland Chemical Co. is offering an unusual and effective line of selling helps. Dealers handling their Dioxogen are liberally supplied with signs, hangers, cut-outs, decorations for windows and counter advertising, also booklets and cards. The firm invites the correspondence of the druggists.

"SAY, Mayme, did you ever have any turtle soup?" asked a rawboned youth of the girl beside him.

"No," admitted the maiden; "but," added she, with the conscious dignity of one who has not been lacking in social experience and opportunities, "I've been where it was."—*Lippincott's.*

SELLS ITSELF.—We are particularly struck by the copy of an advertisement of Major's Cement in the *Pacific Drug Review.* The top line reads "Sells Itself." That is true, and if the dealers will buy this Cement by the dozen so as to get one of the display boxes and put it on the show case or the counter, they will find that the exhibit will remind people of broken articles which they have at home, and the Cement "Sells Itself." In this way the druggist can dispose of several dozen bottles every year; but if the cement is under the counter out of sight there is very little sold. No dealer need fear to send for a dozen. In fact, the Major Mfg. Co. will guarantee to have the jobber take the cement off his hands if it does not sell within a reasonable time.

MOLLY, the new cook, had a habit of keeping her mouth ajar the greater part of the time. The habit annoyed her mistress exceedingly, and one morning she lost all patience.

"Molly, your mouth is open," said the mistress.

"Indeed, ma'am, so it is," said Molly, grinning. "I opened it."—*Youth's Companion.*

LITHOGRAPHED LABELS

on tin containers are durable and lasting advertisements for the goods contained.

Invest part of your advertising appropriation in this class of consumer-appeal-advertising and your sales efficiency will be increased.

Our force of artists is at your service.

AMERICAN CAN COMPANY,

Chicago NEW YORK San Francisco
Montreal
WITH OFFICES IN ALL LARGE CITIES.

DRUG STORE WRECKED BY GAS EXPLOSION.—The Merzbacher-Kelly Co. store, of Marshall, Texas, was wrecked recently by an explosion. Much adjacent property was also destroyed. Sixteen people were hurt and damage done to the amount of $50,000. The explosion is supposed to have been caused by gas. William Rigsby, soda clerk, was dug out of the ruins badly bruised. Among those injured were two women who were customers in the store at the time, and druggist William Ochiltree and George Recknagle, a clerk. The ruins fortunately did not catch fire or there might have been several fatalities.

When the explosion came the gas mains were broken and the imprisoned people were forced to inhale the gas. Consequently many were overcome. The rescuers, too, experienced the greatest difficulty in working in such an atmosphere and many of these succumbed and had to be carried out and revived.

The explosion was heard and felt in all parts of Marshall.

A GENTLEMAN traveling in France, having run short of Euthymol Tooth Paste, paid a visit to a pharmacy in the town in which he was, and the following conversation ensued:

"Vous avez la pâte dentifrice Euthymol, Monsieur?"

"De Parke, Davis et Cie, Monsieur?"

"Oui."

"Ah, non, Monsieur! Mais nous avons Cascara Evacuant."

"I SEE society people at Newport had a baby show."

"Where did they get the babies?"

"It was a loan exhibition, I believe."—*Washington Herald.*

THE difference in price between an inferior olive oil and a really good grade is but a trifle compared with the disparity in taste. Get the best, one that you have pleasure in recommending. It pays in the long run. The Lautier Fils Brand has that bland, nutty flavor characteristic of the better quality of true olive oil. Write for prices to George Lueders & Co., Wholesale Agents, New York, Chicago, and San Francisco.

HOWELL: "Why don't you run for office?"

Powell: "If I did I would have to walk back."—*Washington Times.*

A NEAT CORK gives a finished appearance to a package. The moment the customer puts his fingers on the stopper, he is impressed with the edge and the smooth, firm surface. Isn't that right? Specify McCready on your order for corks and you will feel secure about your stoppers.

STERNE once said that the most accomplished way of using books is to serve them as some do lords; learn their titles and then brag of their acquaintance.—*Life.*

NOTICE!

Certain retail druggists are advertising imitations of the Marvel "Whirling Spray" Syringe and illegally using, in description of their imitation, the words "Whirling Spray."

We wish to advise the trade that these words are the Trade-Mark of the Marvel Company, and that anyone using them in connection with any syringe, other than a Marvel "Whirling Spray" Syringe, is liable to us for damages.

We have created a demand for our Syringe by extensive advertising; we allow dealers a large profit on its sales, and are sure that every fair-minded dealer believes us entitled to fair treatment.

This is a word of caution to a few unscrupulous dealers against advertising any vaginal syringe other than a Marvel as a "Whirling Spray" syringe, or selling any imitation of the Marvel Syringe when a "Whirling Spray" syringe is ordered.

MARVEL COMPANY

Makers of Marvel "Whirling Spray" Syringe

MRS. POST: Have you any cooks who can make mayonnaise, lobster Newburgh and croquettes?

Proprietor of Intelligence Office (proudly): Lots of 'em.

Mrs. Post (sadly): Bring me one of the other kind. I've got dyspepsia.—*Harper's Bazar.*

A BOOK FOR UNREGISTERED CLERKS.—"Board Questions Answered" is a book which every unregistered clerk ought to have. Here is what one of the leading drug journals recently had to say about the book:

The purpose of this book, as stated by the compilers, is, on the one hand, to refresh the memory of students who have taken an adequate course of pharmacy, and on the other hand, to give them an idea of the style of questions asked by different boards of pharmacy. To this end we believe the book will be found serviceable. The questions employed are those used by ten different boards and we find the answers supplied sufficiently comprehensive to give the user of the book the information sought in the fewest possible words. If all the papers presented by applicants taking board examinations were up to the standard of the answers given in this book, what an easy time the examiners would have!

This book costs $1.50 post-paid. The publisher is E. G. Swift, P. O. Box 484, Detroit, Mich.

"How did he manage to escape from the penitentiary? I thought it was well-nigh impossible."

"Well, he figured it out on scientific lines. Somebody smuggled him a pair of trunks, and after he got outside everybody thought he was running a marathon."—*Kansas City Journal.*

AN old couple came in from the country with a big basket of lunch to see the circus. The lunch was heavy. The old wife was carrying it. As they crossed a crowded street the husband held out his hand and said:

"Gimme that basket, Hannah."

The poor old woman surrendered the basket with a grateful look.

"That's real kind o' ye, Joshua," she quavered.

"Kind!" grunted the old man. "I wuz afeared ye'd git lost."—*Argonaut.*

EVERY druggist will admit that an attractive show case will work wonders in the cigar sales. Frankly, haven't you made that observation yourself? The Detroit Show Case Co. makes a fixture that not only keeps cgiars in good condition but also displays them to the best advantage. Every druggist who wants to boost his business in this department should learn about it. Write for particulars to the Detroit Show Case Co., 476-490 West Fort Street, Detroit, Mich.

SPORTSMAN: What do you want?

Villager: I'm the man you wounded at your last shoot.

Sportsman: Ah, I remember; but I gave you compensation at the time.

Villager: Yes, as I heard you were going out again to-day I thought I would ask you for a little in advance.—*Pele Mele.*

POPULAR AND PROFITABLE

The most popular drink at Soda Fountains to-day is

ORIGINAL GENUINE HORLICK'S MALTED MILK

served hot, for it hits the spot these cold, raw days.

It has increased the profits at the soda fountain.
The quality always satisfies and there is an increasing demand as a result of the persistent publicity methods of

HORLICK the Originator of MALTED MILK

An attractive line of advertising for Fountain display, Hot or Cold, will be sent you upon request, all charges prepaid. Write to-day.

Horlick's Malted Milk Company

Racine, Wisconsin

A SINGULAR COINCIDENCE.—Our attention has been directed to two druggists whose names and locations are as follows:

W. C. Leik, Dubuque, Iowa.

C. W. Liek, E. Dubuque, Illinois.

The two men are not related in any way. One is on the west side of the Mississippi River and the other directly across on the east side of the river. There is a transposition of the initials and of the middle letters of the surnames. They must receive each other's mail occasionally.

THE Philadelphia College of Pharmacy announces a course of public lectures for 1912-1913. They will be given primarily for the students of the college, but pharmacists and others who may be interested are cordially invited. The lectures, unless otherwise announced, will be held in the Materia Medica Lecture Room of the College, and a number of them will be illustrated with lantern slides, experiments and specimens. The speakers are men of national prominence in various lines of scientific work, and the subjects cover a wide range

---

"No USE locking the stable door after the horse is stolen."

"I should say that was the very time to lock it. They might come back after the automobile."—*Washington Herald.*

RESTAURANT PATRON (caustically): "I am glad to see your baby has shut up, madam."

Mother: "Yes, sir. You are the only thing that's pleased him since he saw the animals eat at the Zoo."—*Puck.*

MEAD & Co. of Detroit, Mich., are selling a drug mill that appeals to every druggist who wants a well-equipped pharmacy. It will grind anything a druggist desires to powder. It requires little power and will reduce any drug to a fine condition in a short time. So many occasions arise where a machine of this character is needed in the store. Druggists should be interested in the Mead mill. Write for an illustrated catalogue. The address is 20th Street and Station B.

"I UNDERSTAND that Mr. Grabwell started in life by borrowing fifty dollars. You must admire a man with courage like that."

"No, I don't," replied Mr. Growcher. "The man I admire is the one who had the courage to lend him the fifty."—*Washington Star.*

PHARMACISTS who fit glasses will do well to buy their optical supplies from the Oskamp-Nolting Co., of Cincinnati, Ohio. This firm gives special attention to the drug trade. Write for a catalogue.

CROWN FRUIT PRODUCTS

ARE IN A CLASS OF THEIR OWN

Do you want to serve the BEST

HOT CHOCOLATE

Then order "CROWN COCOA STOCK." There is nothing as good at any price, no matter what kind you use, this is better. Don't take our word for it, try it yourself, that is the test.

Send for list of Hot Soda Specialties.

CROWN CORDIAL & EXTRACT CO.

18 Desbrosses St., New York City

LIZZIE, the inexperienced cook, poked her head in at the dining-room door. "Please, ma'am," she asked, "how will I know whin the puddin' is cooked?"

"Stick a knife into it," said her mistress—also inexperienced—recalling the instructions in the cook book. "If the knife comes out clean, the pudding is ready to serve."

"I'll do that, ma'am."

"And—oh, just a minute, Lizzie." The mistress had a bright idea. "If the knife does come out clean, you might stick all the rest of the knives into the pudding." —*Youth's Companion.*

Now that winter is here many of our readers will want formulas for hot soda drinks. The Spatula Soda Water Guide gives any number of them. E. F. White, the author, is a recognized expert in the work, having written voluminously in the pharmaceutical journals on subjects pertaining to the soda fountain. The price of the Spatula Soda Water Guide is $1.00 post-paid. Copies may be had by ordering from the Spatula, 2 Sudbury Building, Boston, Mass.

MRS. SHORTLEY was discussing the latest fashions with a young lady caller.

"Did you say your husband was fond of those clinging gowns, Mae?"

"Yes; he likes one to cling to me for about three years."—*Lippincott's.*

FILKINS: "Thought you intended to sell your suburban home?"

Wilkins: "I did, until I read the alluring story my advertising man wrote; then I decided to keep it myself."—*Judge.*

THE Albany Chemical Co. of Albany, N. Y., makes a specialty of Hydrogen Peroxide and solicits inquiries from druggists. Quotations will be furnished on request.

"How sweet to have a friend whom you can trust!"

"Yes, especially if he doesn't ask you to trust him." —*Sacred Heart Review.*

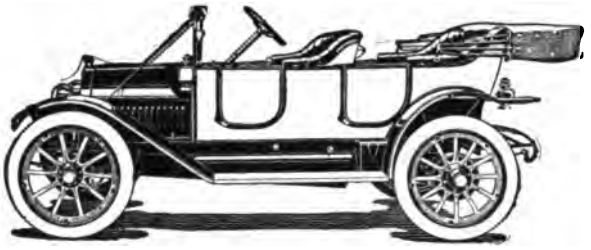
"PA, what's a genius?"

"Ask your mother; she married one."

"Why, I didn't know ma had been married twice."— *Houston Post.*

NOTHING speaks better for a college than the success of its graduates. Pharmacists who have taken a course in optical work in the South Bend College of Optics have been well rewarded. Why? Because they get the proper training at the start. They begin right. If you wish to learn to fit glasses, take a course of study with the South Bend College of Optics, No. 4 Kamm Bldg., South Bend, Ind.

Cartercar



Model "R" Touring Car—5 Passenger—40 H. P. Equipped completely

$1600

The man who buys carefully---

—Will at once realize the superior advantages of the patented Friction Transmission of the Cartercar. The fact that it enables the Cartercar to negotiate roadways which are impossible for gear-driven cars—to climb 50 per cent. hills—affords an unlimited number of speeds—and eliminates gear troubles—is making this car more popular every day. You have all these speeds with a one lever control—which adapts the Cartercar especially for the busy druggist. There are no jerks nor jars—affording the utmost comfort and lowest upkeep and repair expense.

Five splendid models—with complete equipment—$1200 to $2100. If you are intending to buy a car you owe it to yourself to learn about the Cartercar before you decide. Write for information to-day.

Cartercar Company

PONTIAC, MICHIGAN.

BRANCHES: NEW YORK, CHICAGO, DETROIT, AND KANSAS CITY.

YOUNG WIDOW: "Did you have any trouble getting Jack to propose?"

Girl Friend: "No, dear; I told him you were after him."—*Boston Transcript.*

MANY housewives like to concoct their own cough syrup. By stocking Pinex druggists are able to get a certain amount of patronage out of such customers. People buy the Pinex and with it prepare their own cough remedy. It satisfies a woman's desire to do her own dispensing and at the same time gives the druggist the business. The whole idea is a happy one and every dealer will do well to keep Pinex in stock.

NEW STAMPS FOR PARCEL POST.—Arrangements have been made by Postmaster-General Hitchcock for the engraving and manufacture for a series of twelve postage stamps of a novel size and design for use in the parcel post system that will become operative on January 1 next.

These special stamps will be somewhat larger than the ordinary postage-stamps, and will be so distinctive in color and design as to prevent possible confusion with the stamps used for other classes of mail. There will be three series of designs in the issue. The first series will illustrate modern methods of transporting mail, one stamp showing the mail car on a railway train, another an ocean mail steamship, a third stamp one of the automobiles now used in the postal service, and a fourth the despatch of mail by aeroplane.

In the second series there will be shown at work in their several environments the four great classes of postal employees, mainly post-office clerks, railway mail clerks, city letter carriers, and rural delivery carriers. The third series will give four industrial scenes showing the principal sources of the products that are to be transported so extensively by parcel post. It is planned to have these stamps ready for distribution by December 1 in order that they may be supplied to the 60,000 post-offices before the first of January.

Under the law ordinary stamps will not pay postage on matter sent by parcels post, and the new stamps will be used exclusively for this purpose.—*International Confectioner.*

IT is enough to have to look to the conditions of the scales without giving attention to the accuracy of one's graduates. Obtain the Whitall Tatum graduates and you need give these containers no further thought. Every mark of measurement is gauged correctly.

"THESE here New Yorkers is bound to have their sports, I see," said Uncle Silas.

"In what way?" asked the boarder.

"Why," said Uncle Silas, "since they give up hoss-racin' they've gone in fer the turkey trot. Don't seem to me 's thet could be very excitin'."—*Harper's Weekly.*

VICTORIOUS
Underwood Typewriter

WINS THOUSAND DOLLAR SILVER TROPHY CUP FOR THE SEVENTH CONSECUTIVE TIME

In competition with all other writing machines, breaking the International Professional Record for

SPEED AND ACCURACY

At the Annual Business Show, November 12, 1912, in New York City. Operated by Florence E. Wilson, at 117 net words a minute for one hour.

The Underwood holds and always has held the World's Championship.
The Underwood holds All the World's Records for Speed and Accuracy.
More Underwood Typewriters are Manufactured and Sold than Any Other Writing Machine in the World.

"The Machine You Will Eventually Buy"

Underwood Typewriter Company, Incorporated

UNDERWOOD BUILDING, NEW YORK.

Branches in All Principal Cities.

WOMEN IN POLITICS.—Women in the United States have achieved their present spaciousness of freedom and opportunity quickly, as we reckon time in Europe, but not without a struggle. When the late Miss Susan B. Anthony began her crusade in the 'fifties, American women had their full share of disabilities. The masses of them were almost wholly uneducated. High schools as well as colleges were closed against them. Their appearance on public platforms was a social misdemeanor of the first order. Except as teachers or domestic servants they were virtually cut off from employment. The States had one and all excluded them from the suffrage. The wife had no legal existence. She could not own property, buy or sell, sue or be sued, make a contract, testify in court, or control her own wages. The father could apprentice young children without the mother's consent, and dispose of them by will at his death. There was but one cause for divorce, and the husband, though the guilty party, could retain the property and the children. Things have moved since then. Educationally, legally, and industrially there is to-day very little to choose between the status of women in America and the status of men. In the sphere of education matters have indeed proceeded so far that a foreigner like myself is tempted at times to wonder whether there may not be some danger of American culture becoming slightly effeminate. As for their civil and legal rights, women in America have little to complain of. In three-fourths of the States a married woman may own and control her separate property, and in all of them she may dispose of it by will, the same as a married man. In two-thirds of them her earnings are absolutely under her own control. In almost all of them she may make contracts and bring suit in the courts. The old laws of inheritance have been so changed that a widow is now in full possession of her rights. The divorce laws from Maine to California seem to be especially framed to meet the convenience and wishes of women. Industrially, too, women are equally favored. Broadly speaking, there is no occupation in which they may not engage with the full approval of the law and public opinion.—*Harper's Weekly.*

THE beautiful displays in the large mercantile stores serve to show how window trims are regarded by modern business men. They are trade winners. They attract buyers. Wouldn't it pay you to give more attention to that department of your store? Perhaps we can help you. We have published a book on the subject of pharmaceutical window exhibits which we feel should be a source of help and interest to every druggist. It is entitled "Window Displays for Druggists" and contains over a hundred trims with full descriptions and amply illustrated. The price is only $1.00 post-paid. Address remittances to E. G. Swift, Publisher, P. O. Box 484, Detroit, Mich.

WAITER (under notice): Steak not tender enough? Do you expect it to jump up and kiss you?—*Tit-Bits.*

SPECIAL VALUE

1912 Xmas Post Cards

100—DESIGNS—100

This line of New Xmas Post Cards has an exceptionally large variety of subjects, a combination of three (3) large factories, all made by

American Artists
American Dies
American Cardboard
American Machinery

TRADE PRICES:
$0.60 for 100 Assorted
1.00 for 200 "
2.25 for 500 "
By mail, 8 cents per 100 extra.

THE AMERICAN NEWS COMPANY,
POST CARD AND NOVELTY DEPT.,
Nos. 9-15 Park Place, - - New York City

MR. RAYMOND appeared at his neighbor's door one November evening at dusk in a towering rage and uttering fierce threats against his neighbor's dog Nero. Vainly the neighbor tried to explain that Nero was only a puppy. "He belongs to Johnny," he went on, "and it would break Johnny's heart if anything happened to him. I think," hopefully, "that his manners will improve."

"Manners!" repeated Raymond. "I'm not complaining of his manners, but his nature. After he had jumped all over me he bit the back of my leg."

"That's as far as he can reach," broke in Johnny, in a wounded tone. "You don't expect a little pup like him to bite a big man like you on the neck, do you, Mr. Raymond?"—*Youth's Companion.*

If you dispense oils, paints or any other fluids in bulk, you will be interested in the containers of the National Can Company of Detroit, Mich. This firm makes a wide line of tin cans, either plain or ornamental, for use in the drug business. Write for an illustrated catalogue.

HE WAS THERE.—Judge Morris, a celebrated Irish advocate, was once obliged to hear a case at Coleraine, in which damages were claimed from a veterinary surgeon for having poisoned a valuable horse. The issue depended upon whether a certain number of grains of a particular drug could be safely administered to the animal. The dispensary doctor proved that he had often given eight grains to a man, from which it was to be inferred that twelve for a horse was not excessive. "Never mind yer eight grains, docther," said the judge. "We all know that some poisons are cumulative in effect, and ye may go to the edge of ruin with impunity. But tell me this: The twelve grains—wouldn't they kill the divil himself if he swallowed them?" The doctor was annoyed, and pompously replied, "I don't know, my lord; I never had him for a patient." From the bench came the answer: "Ah, no, docther, ye niver had, more's the pity! The old bhoy's still aloive."

THE Onken Younit Window Fixtures have certainly taken a firm hold on the drug trade of this country. Wherever you see an attractive trim, you are very apt to find these fixtures. And there is good reason for it. They minimize enormously the work of arranging a display. It is no trick to set the stands in the window and place thereon a few tubes of tooth paste or anything a man may wish to sell. Far from being a burden, the work of setting up a trim becomes mere play. Then, too, the fixtures add to the beauty of the trim. There is no question about it. As for the price, a set of Onken Younits can be obtained for $15, and any druggist who has not yet possessed himself of these useful fixtures will find them an excellent investment. They soon pay for themselves. A beautiful book illustrating trims made with the Younits may be had by writing The Oscar Onken Co., 726 Fourth Avenue, Cincinnati, Ohio.

$3,714.30 in Ten Days

St. Louis, Mo. 1000 Miles Away Plainfield, N. J.

Yet only ten days required, from the date of fire, for the check to reach Mr. Nagle.

Plainfield, N. J., Oct. 28th, 1912

Mr. H. W. Eddy, Att'y and Manager,
Druggists' Indemnity Exchange, St. Louis, Mo.

Dear Mr. Eddy:

Your letter together with check No. 1008 for $3,714.30 received, in full settlement of my claim. At this time I wish to acknowledge with thanks your kind letter and sympathizing remarks in regard to my recent fire loss and mishap.

I must congratulate your Company in their quick settlement, and also their fair and gentlemanly treatment accorded me by your adjuster, and assure you the check has been received with much comfort and appreciation at this early date.

Trusting that more fellow druggists may be convinced that a **Druggist Company** is far cheaper and effects quicker adjustment than the old line companies, and again thanking you and your Company, I remain,

Very truly yours, C. M. NAGLE.

Such Services are Valuable.
Join with our five thousand subscribers and be securely protected.

DRUGGISTS' INDEMNITY EXCHANGE, ST. LOUIS, MO.

H. W. Eddy

Attorney and Manager.

The Pen with the Magic Button

Its self-filling feature is exclusive. Filled by simply twisting the button, holding the pen in the ink, and, by a reverse twist, the pen is filled.

The "A. A." Self-filling fountain pen, for which there is no substitute, gives universal satisfaction.

Every dealer handling our self-filler appreciates its exclusive selling features. There is no joint to stick, break or leak, the reservoir is guaranteed for two years, and our gold pens are furnished in such a wide variety of styles and sizes that you can suit your most fastidious customer.

The "A. A." Clip, our latest achievement, excels by far any fountain pen clip yet produced. Made in one piece of German Silver, Sterling Silver, Gold Filled and Solid 14 kt. gold. It holds perfectly firm and can be attached almost instantly.

With your initial order for one dozen clips, we will send you gratis, tools for attaching the "A. A." Clip to any cap. For catalog and trade discounts, write your local jobber or

ARTHUR A. WATERMAN & COMPANY,
100 Thames St., NEW YORK.

NOT CONNECTED WITH THE L. E. WATERMAN CO.

EXECUTIVE BOARD OF THE A. D. F. I. Co. MEETS.—The third quarterly meeting of the Executive Board of the A. D. F. I. Co. was held in Cincinnati on Friday and Saturday, November 8-9. All of the members of the Board were present. Preliminary arrangements were made for the annual directors' and stockholders' meeting, which will take place in February.

Considerable attention was given to the entering of additional States with the New Year, the State of Louisiana finding greatest consideration. The company is now operating in thirty-one (31) States, being under the supervision of thirty-one (31) State Insurance Departments, and having licensed agents in each of said States.

The business of the company was found to have a steady and conservative growth, fully meeting all expectations. During the first nine months of the year insurance was written to the amount of $7,426,561.04, at a premium of $75,972.64. This shows an increase in business over the corresponding period of last year amounting to $1,500,250.71, at a premium of $14,021.59. The total business in force on October 1 amounted to $9,466,690.73, at a premium of $98,185.85.

The income for the first nine months from premiums, securities, etc., was $86,299.47. The net fire losses incurred during the first nine months of the year amounted to $32,827.25. The net expense charged against the business for the first nine months, including all items, amounted to $26,046.13. The increase in re-insurance reserve on increased business retained by the company amounted to $5,046.79. Business re-insured was at a premium of $4,471.44. The amount saved by policyholders during the first nine months because of lower premium charge was $25,324.21.

THE Hoffman-LaRoche Chemical Works of New York are supplying a superior quality of medicinal chemicals to the drug trade. It were well to bear this house in mind in ordering goods.

"LOOK at this beautiful castle."

"Don't bother me. How can I read the guide-book if you keep pestering me to look at rocks and castles?" —*Washington Herald.*

HAVE you made up your mind to get any certain amount of business during the coming season? If so, you have made a good start. But to succeed you should be sure your racks are filled with good local view cards, the kind The National Colortype Co. of Cincinnati, O., makes. This firm will send you samples. Write for them.

AUTHOR: "The very first thing I sent to a magazine was accepted."

Young Friend: "Was it poetry or prose?"

Author: "Prose. It was a check for a year's subscription."—*Boston Transcript.*

ORDER

GALACTENZYME	—Abbott
NUCLEIN	"
H-M-C	"
SALINE LAXATIVE	"
SALITHIA	"
SODOXYLIN	"
CALCIDIN	"
INTESTINAL ANTISEPTIC	"
DIGIPOTEN	"
NUGUAIACAL	"
BILEIN	"
ANESTHAINE	"
CALCIUM SULPHIDE	"
CHROMIUM SULPHATE	"
THALOSEN	"
SLEE'S SMALL POX VACCINE	

The demand for all of these items is growing rapidly.

If your Jobber is not supplied write to

THE ABBOTT ALKALOIDAL CO.
CHICAGO

Now is

Lenox Chocolate

Time

THERE is no line of confectionery with so strong a hold on popular favor as LENOX CHOCOLATES. A great factory is heavily taxed to meet a demand already enormous, yet steadily growing larger.

This means that LENOX CHOCOLATES are going to pay dealers *better* than ever before. It means that shops keeping these delicious confections always in stock are going to *make money*. It indicates a *harvest time for wide-awake men*. If you, personally, do not carry LENOX CHOCOLATES, *now* is the time to stock them.

NEW ENGLAND CONFECTIONERY CO.,
Boston, Mass.

"MISS MY husband? Why should I? He left me plenty of money, and at breakfast I stand a newspaper up in front of his place and think he's here just the same."—*Puck.*

MRS. HENNEPECKKE: "Well, I guess I have just as much chance of getting to heaven as you have."

Mr. Hennepeckke: "Not if I get there first."—*Philadelphia Record.*

ONE who reads the specifications of the Red Cross Perfect Fountain in the ad. of the Bishop-Babcock-Becker Company in this issue must marvel at its construction. Every device that human ingenuity can devise for the building of a clean and sanitary apparatus is called into service. Whether you intend to buy a fountain now or later, as a soda dispenser you will be interested in the features of this fountain. Read the Bishop-Babcock-Becker ad. in this issue, and then if you desire to inquire further about prices or other particulars, write the Cleveland office. Or consult any of the numerous branches. The concern is an immense one with representatives all over the United States.

AN old French nobleman told a lady that formerly his polite attentions were taken for declarations of love, but that now his declarations of love were taken for polite attentions.

"FATHER," said the small boy, "what is a demagog?"

"A demagog, my son, is a man who can rock the boat himself and persuade everybody that there's a terrible storm at sea."—*Washington Star.*

BOARD QUESTIONS ANSWERED has been a good seller. But the number of copies sold is not the measure of its success. It is what a man says about the book after he gets it that determines its worth. By letter and even by telephone we have been complimented on the work by clerks and students who have bought it. Board Questions Answered, as our readers may know, is intended for the man who is making an earnest effort to pass the State pharmacy examination. It contains complete sets of examination papers used by boards of pharmacy in different parts of the country. The answers are given in an intelligent way, providing a very useful training for men who aspire to their registration papers. Board Questions Answered may be had by sending $1.50 to E. G. Swift, Publisher, Detroit, Mich.

"I WANT you to build me a fashionable home."

"Have you any special ideas as to the style of house you want?" asked the architect.

"Not exactly. I want one of those modern places. You know the kind I mean—one with a living-room too big to keep warm and a kitchen too small to cook in."—*Detroit Free Press.*

HAVE YOU GOT ONE

We mean a **DAUS IMPROVED TIP TOP DUPLICATOR** that ideal assistant, always ready, when you want to quickly make clean, clear, perfect duplicates of manuscript, form letters, reports, etc.

Our negative rolls now have our new "Dausco" Oiled Parchment Back, giving additional strength and efficiency.

100 copies from pen-written and 50 copies from typewritten original.

Complete Duplicator, cap size (prints 8½x13 in.).
Price $7.50 less special discount of 33⅓ per cent.
net - - - - - - - - - - - - **$5.00**

But we don't want your money until you are satisfied that our machine is all right, so if you are interested just write us to send it on

TEN DAYS' TRIAL WITHOUT DEPOSIT

That's fair enough, isn't it? Then send to-day. Circular of larger sizes on request.

FELIX A. C. DAUS DUPLICATOR CO., Daus Building, 111 John St., New York.

Take Care of the Minutes Now---
Later on They Will Take Care of You.

A few minutes each day for a short time will enable you to provide yourself the means for an independent livelihood. We refer to our correspondence course in **OPTICS**, which experts declare is the most complete and thorough short of a university course. Hundreds who have taken our course are enjoying a profitable and growing patronage—**why not you?** Prepare yourself for something better than you are doing now. The expense is trifling. A regular $25 college course for less than half this sum, for which you can pay $2 down and the balance $1 weekly if you wish.

We follow your work, help you to a full understanding of it, and give you final examination—all by mail. And when you pass the examination we give you authorized degree and DIPLOMA.

A postal will bring you full information. Address,

AMERICAN OPTICAL COLLEGE, Dept. O, DETROIT, MICH. (Oldest Correspondence School of Optics in the World.)

SPECIFY

P-W-R
CHEMICALS

MORPHINE SULPHATE, FLAKES OR CUBES
QUININE SULPHATE AND OTHER SALTS

STRYCHNINE BISMUTH SUBNITRATE ACID CITRIC
POTASSIUM IODIDE CODEINE AMMONIUM IODIDE

A FULL LINE OF MEDICINAL CHEMICALS

Supplied by Jobbers throughout the United States.

POWERS-WEIGHTMAN-ROSENGARTEN CO.
NEW YORK PHILADELPHIA SAINT LOUIS

"THIS is the fifth time you have been brought before me," said the judge, severely.

"Yes, your honor," smiled the offender. "When I like a feller I like to give him all my business. You see——"

"Sixty days!" roared the judge.—*Harper's Weekly.*

GOMBAULT'S Caustic Balsam is said to be an excellent remedy for strained tendons in horses. It is a capital liniment for man, too. The Lawrence-Williams Co., 1013-1017 Oregon Avenue, Cleveland, offers to send any druggist picture cards and attractive window hangers to boost the sale of this Balsam. Write for some of this material.

"How's your insomnia, Slocum?"

"Worse and worse! I can't even sleep when it's time to get up!"—*Laughter.*

D. J. DUSAAR, of Holland, Mich., offers to make souvenir post cards from any photo or view which you may care to submit. The price is $1.50 a hundred. Send a trial order and let Mr. Dusaar show you some specimens of his skill.

"Now this," said the salesman—"this is a sixty-horse car——"

"But I don't want a horse car," said Dubbs. "I want an automobile."—*Harper's Weekly.*

ALBANY HYDROGEN PEROXIDE

(Medicinal 10 volume 3 per cent.)

WE SOLICIT YOUR INQUIRIES.

ALBANY CHEMICAL CO., - - ALBANY, N. Y.

No. 133. Candy Case.

One of the many modern styles of Show Cases shown by us in our new catalogue, which we have just received from the printer. Improve your store and sales by installing TIME SAVER Show Cases and Fixtures.

Time Saver SHOW CASES

Saginaw Show Case Co., Ltd.

Makers of High-Grade Fixtures

Saginaw, W. S., Michigan

CATALOGUE MAILED UPON REQUEST

THE LAWYER: You understand the nature of an oath, don't you?

The Lady (a little flurried): I beg your pardon?

The Lawyer (testily): What is the nature of an oath?

The Lady (triumphantly): Profane, isn't it?—*Cleveland Plain Dealer.*

JAPANESE POST CARDS aside from their artistic quality, are big profit-makers for the druggist. Have you seen them? The Central Post Card Co., Box 594, Chicago, will send you 50 sample cards for 35 cents or 150 for a dollar. Send for some.

A GET-TOGETHER MEETING.—Bayonne, N. J., medical and pharmaceutical circles are chuckling over a quaint incident that occurred the other afternoon in a certain pharmacy. It seems that a citizen called upon the druggist proprietor to send in a phone call for a physician, and that upon the receipt of the request to telephone he said to the caller:

"You want a doctor, not a fakir."

Well, anyhow, the man eventually told the physician referred to about what the knight of the pestle and mortar had said of him. The medico was mad clear through, and lost no time in hunting up the druggist.

"Did you call me a fakir?" he inquired in a very angry tone of voice.

The druggist was game. He replied: "Sure thing."

And then something happened.

The exchange of left-handed compliments waxed exciting for a few brief moments, and then the enraged medico and the pharmacist clinched—so the story goes.

During a brief breakaway the physician picked up a bottle containing a patent preparation guaranteed to "knock out pain." He hurled it at the druggist and the latter dodged. The bottle crashed through one of the show windows of the store, and part of the pane was gone in a jiffy.

A civil suit to recover damages for slander is now said to be imminent on the part of the doctor, while a counter suit to recover the value of the smashed window is quite probable on the part of the druggist.—*Voice.*

ANY one who sees the ad. of the McGown-Silsbee Litho Company in this issue, and every reader should see it, must be impressed with the variety of holiday cards offered by this firm. For range of subjects and lowness of price it would be hard to find a more attractive assortment. Make your selection now. The McGown-Silsbee Litho. Company is located in New York, 124 Park Row.

"He's a brute."

"How so?"

"When she promised to be his wife he said he would do everything in his power to make her happy."

"Well?"

"He spends all of his time at the club!"

"Well, if he is really a brute that ought to help some."—*Houston Post.*

LIPPINCOTT
SET UP
ALL STONE CONSTRUCTION

Soda Fountains Save You Money and Labor

¶ The only HIGH QUALITY Apparatus at moderate prices. Have our new "E-Z-Cleaned" Lids and Covers. Many improvements. Made in 6, 8 and 10 feet lengths. This is your opportunity. Write now for descriptive circular.

A. H. & F. H. LIPPINCOTT, Inc., *Mfrs.*
Soda Water Apparatus, Carbonators, Ice Shavers, Sundries
PHILADELPHIA — NEW YORK

EUREKA
PRESCRIPTION FILING CABINET
WRITE FOR CATALOGUE
E.B. READ & SON CO.
427 E. SARATOGA ST BALTIMORE, MD.

POND'S EXTRACT COMPANY'S

"VANISHING CREAM"

THE BEST toilet cream on the market and the best one for the dealer to handle

Write for particulars of our $4.00 Special Case NETTING 75 PER CENT PROFIT

LAMONT, CORLISS & COMPANY, Selling Agents
Dept. S. 131 Hudson Street, New York City.

"WHY is it that so few people seem anxious to talk to Mr. Carpington? He seems very well informed."

"That's just the difficulty," answered Miss Dimpleton. "He's one of those dreadful men who know enough to correct your mistakes when you quote the classics, and who don't know enough not to do it."—*Washington Star.*

ARE you looking for some first-class confectionery for the holiday season? Lenox chocolates have a national reputation and will be found a boon to the candy department of any store. Quotations may be obtained by writing the New England Confectionery Co., Boston, Mass.

CUSTOMER: "Is that a real ostrich feather?"

Draper: "What, for tenpence? Oh, no, madam; ostrich is merely its *nom de plume*."—*London Telegraph.*

Now that the season for hot drinks is here, look well to the quality of your cocoa. It means so much to any fountain. Wilbur's Velco is an exceedingly good cocoa. Are you familiar with it? Prices and samples may be had by writing H. O. Wilbur & Sons of Philadelphia.

SPENDTHRIFTS rush in where rich men fear to tread. —*Life.*

Merchants Everywhere

GOOD STOREKEEPING is a new Trade Review for Retail Merchants who sell Nationally Advertised Goods.

You may have your name placed on the complimentary mailing list and receive the paper without charge, on application.

Good Storekeeping carries with it the privilege of receiving a moving picture slide bearing your name, without expense or obligation to you.

Other helps furnished at no charge are cuts for home newspaper advertising, post-card announcements, etc.

The November Number of this splendid new publication is just off the press, and your copy is ready for you.

Valuable information is given from trade papers regarding hardware, groceries, jewelry, dry goods, music goods, drugs, toilet preparations, furniture, house furnishings and department store lines.

It Tells How to Profit by the Effort of Great National Advertisers

"Roche"—the symbol of distinctiveness in Chemicals and Alkaloids. Demand 'Roche' products, because it pays.

The Hoffmann-LaRoche Chemical Works New York

PURITY
Highest
QUALITY
Guaranty

ESSENTIAL OILS

FRITZSCHE BROTHERS, New York

Specify MERCK'S

on your orders

THE amateur golfer had not been doing very well, and toward the close of the round he turned to the caddie and said:

"Let me see; is that one hundred and ninety-five or one hundred and ninety-six strokes?"

"I don't know, sir," was the reply. "What you need is an adding machine, not a caddie."—*Ladies' Home Journal.*

THERE is a genuine satisfaction in owning a stock of drugs and chemicals that come from standard houses. Alkaloids and metallic salts bearing the labels of Powers-Weightman-Rosengarten Co. are a source of credit to any pharmacy. Remember this brand in ordering from the jobber.

CHICAGO DRUG CLUB SMOKER.—The first big affair given this season in Chicago drug circles was the smoker held by the Chicago Drug Club at the Hotel Sherman, Tuesday evening, November 12. A greater success than ever was scored by Peter Roth, the chairman of the Entertainment Committee, so ably assisted by Charles Redig, vice-chairman. A programme of six high-class vaudeville acts was given under the direction of Mr. Lou Sievers, and during the cabaret stunts a number of prominent members received special attention from the girls with the winning ways. As usual, a very appetizing "Dutch lunch" was served, with a sufficiency of liquid refreshments and good cigars on the side. This event was for members only. It brought out a large attendance, and as Brother Kellett says, "everybody had a good time."—R. D. KEIM, Chairman Press Committee.

are Sending for Good Storekeeping

Photographic copies of advertisements from Good Housekeeping Magazine are given in large numbers, serving as a guide to salable goods. Good Housekeeping guarantees to your customers all products advertised in its pages. Please remember that you pay nothing and promise nothing; your interest in nationally advertised goods is sufficient.

Good Housekeeping Magazine

381 Fourth Avenue New York City

This coupon will bring the paper at once.

SEND FOR IT TO-DAY

B. P.

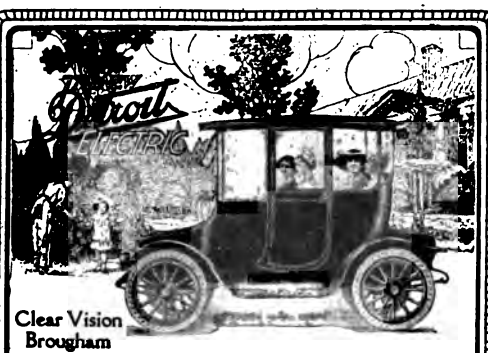
GOOD HOUSEKEEPING MAGAZINE
381 Fourth Ave., New York

Please enter the name of my establishment (Store Name Here)

on the complimentary mailing list for Good Storekeeping. I carry a fair assortment of advertised goods in my line.

Name_____

Address_____



Clear Vision Brougham

Model 42

Arrived!

IT'S here—the electric automobile for which you have been waiting—*The Detroit Electric Clear Vision Brougham for 1913.* It fits every need of motorists. It is suitable for all occasions.

It is driven from the front seat, all seats facing forward. You not only have a clear vision of the road ahead, but in addition you have a clear view at either side or the rear as there are no corner panels to obstruct the view. Glass has even replaced these rear corners, formerly built of wood.

After years of effort, we have solved the problem of a standard body design that is destined to be a classic of the body builder's art—always in style. For comfort, ease of handling and appearance, *The Detroit Electric Clear Vision Brougham* must appeal to you as being *fundamentally* right. It's the most logical, common sense, practical—yes, and lawful—electric automobile for the congested traffic of city streets.

How well we have succeeded in building a car of standard length, proper weight and pleasing appearance, yet with a comfortable and compact seating arrangement, can only be appreciated by seeing and riding in a Detroit Electric Clear Vision Brougham, Model 42.

Deliveries will be scheduled according to date orders are received.

Send for our new 1913 catalog.

Anderson Electric Car Co.

421 Clay Avenue, - - Detroit, Mich.

WHY WAITERS STRIKE.—Once, sitting in my usual corner in a restaurant, I heard a much harassed waiter score heavily off a tiresome customer who was ordering oysters. The conversation that took place was the following—the wretched waiter turning to go and execute the order and being brought back each time:

"Say, waiter, I want a dozen blue points."

"Yes, sir."

"Oh, waiter——"

"Yes, sir?"

"Steamed, you know."

"Yes, sir."

"Oh, waiter, you'll see that they're not done too much."

"No, sir."

"Oh, and waiter——"

"Yes, sir?"

"Will you see that they put just a squeeze of lemon in each shell?"

"Yes, sir."

"Oh, waiter, just the smallest amount of butter over them when you serve them."

"Yes, sir."

"And, waiter——"

"Yes, sir."

"Don't forget the pepper and salt."

This remark was too much for the poor knight of the napkin. Turning back again, of his own free will, he said:

"And, sir——"

"Well?" answered the customer.

"Would you like them with or without?"

"With or without what?"

"Pearls, sir," said the waiter, and disappeared.—*Chicago Evening World.*

WELLS & RICHARDSON COMPANY of Burlington, Vermont, maintain that no one dye is suitable for all kinds of fabrics. They take the stand after long investigation that wool or silk requires one dye while cotton or linen demands another. This is the scientific truth upon which rests the manufacture of Diamond Dyes. These dyes come in two separate packages, the customer choosing the one suited to the particular fabric to be colored. No one-for-all affair can expect to compete with Diamond Dyes for the reason that it can't produce the same results.

BONDS FOR THE NON-RICH.—"Bonds of public-service corporations can frequently be bought to yield 5 to 5½ per cent to the investor," says Edward Sherwood Mead, the financial expert, in *Lippincott's.* "These high yields inspire caution. They raise a presumption against the issue. Cautious investors discriminate against high-yield bonds. High interest rates and lower prices—are they not indications of lack of demand for these securities; and is not the explanation of this weaker demand a higher percentage of failures in this field than with the railroads? The investment banker does not waste much time to direct answers to these questions. He prefers to back up his offerings of public-service bonds by detailed evidence of their worth,

obtained by a careful investigation of every factor influencing their value."

After explaining how the business side of the proposition is first investigated, in offering an issue of public-service company bonds, Dr. Mead describes the next step in the investigation—the engineer's examination.

"Every banking house of standing has engineering connections, and large sums are often paid for exhaustive reports. The engineer's examination covers the condition of the plant in reference to maintenance and operating efficiency, the quality of the management, especially as to its demonstrated ability to cultivate amicable relations with the public, and the rates charged, since, if these are higher than those generally prevailing in the State, or higher than sufficient to yield a reasonable return upon the investment, they are likely to be reduced, and the bond issue must be limited accordingly. The engineer also makes a careful appraisal of the cost of replacing the physical property of the company, since this sum represents the figure on which the courts will always allow a reasonable return. The engineer often goes so far as to criticize the policy of the management, to suggest places for improvement in service, and to point out ways in which the company's business can be expanded. His report is a document, often hundreds of pages in length, which gives the banker a complete picture of the property and business which he is asked to finance."

THE ease and accuracy with which the Underwood can be manipulated will commend this machine to the retail druggist. The proprietor himself or one of his clerks can soon learn to manipulate the keys. The whole mechanism conduces to speed and convenience. If you contemplate buying a typewriter, give careful thought to an Underwood. It lends itself in so many ways to the needs of the druggists. For further particulars write the Underwood Typewriter Company, Incorporated, Underwood Bldg., New York.

So long as railroads make a specialty of running fast trains, why should they not give the passengers a rebate in case of delay? The only object in paying extra money to go on a fast train is to save time in getting to your destination. But no railroad dreams of paying if it fails to perform the service.

THIS is the season for the sale of cold cream. Druggists who buy that preparation in bulk will want pretty containers for dispensing it. The decorated tin boxes made by the American Stopper Company of Brooklyn, N. Y., are very artistic. Prices and catalogue will be furnished on request.

"WHAT a lot of style the Browns are putting on!"

"Yes; and what a lot of creditors they are putting off!"—*Tit-Bits.*

POST CARDS

Agents Wanted.

AT ROCK BOTTOM KNOCK-DOWN PRICES

INTRODUCTORY OFFER

1000 COMICS, "Live ones"—100 subjects—perfect in every respect.....$1.50 per 1000—Regular Price, $4.50 per 1000.
THANKSGIVING—Handsomely lithographed, embossed, lots of turkeys, fruits, wheat, etc., 36 designs...per 100, 35 cents.
Better quality, exquisite designs, life colors, extra heavy cardboard, 24 designs.....per 100, 45 cents.
Rhymes and Mottoes—Pleasing color effects, appropriate subjects, excellent for better trade, 24 designs, per 100, 55 cents.
Gold Celloline—Sparkling effects, gold stamped, highly colored, 24 designs, a 5-center.....per 100, 90 cents.
Black and White for hand tinting—selected, pleasing designs, turkeys, children, fruits, etc., 36 subjects. per 100, 55 and 65 cents.
Highly Colored with Silk and Plush Turkeys—Heavily embossed backed, gilded effects, splendid value, 24 designs. per 100, $2.25.
Silk Cushions with Turkeys, Metal Ornaments—Also in book form selling at 15 and 25 cents.....per 100, $4 00 and $8.00.

EVERY EIGHT DOLLAR ORDER GETS YOU THREE LARGE DISPLAY RACKS FREE OF CHARGE.

CHRISTMAS AND NEW YEAR

1000 fully assorted, 100 styles, richly colored embossed, good cardboard, gold effects, at $2.00. Regular price $4.50, retail for one cent.
Highly embossed, artistically finished, splendid color combination subjects, Santa Claus, Christmas trees, mottoes, holly, pointsetters, etc., 25 cent subjects.....per 100, 35 cents.
Better quality, on Ivory im. cardboard, splendid 2-cent sellers, 100 subjects.....per 100, 45 cents.
Rhymes and Mottoes—in mild pleasing colors, select for better trade, exclusive designs. 36 subjects.....per 100, 55 cents.
Imported Lines—Art designs of exquisite taste, appropriate subjects, wonderful color combinations, the best value we ever offered, 300 designs, 5-cent sellers, at 55 and 65 cents per 100.
Gold Celloline, sparkling effects, gold stamped, highly colored, 100 designs, 5-center.....per 100, 90 cents.
Black and White for hand tinting, selected, pleasing designs, Santa Claus, pointsetters, Children, Stockings, etc., per 100, 55 and 65 cents.
Silk and Plush, large assortment, heavily embossed, gilded small sepia landscapes in ovals and squares, about 100 designs, all enveloped.....per 100, $2 50.
All the year round selling cards of every description such as: Mottoes, Comics, Lovers, Birthdays, Congratulations, etc. For samples remit one dollar.
Terms: Cash with order. **Money Back if Not Satisfied.**
Reference: Any Bank in the United States.
Every Eight Dollar Order Gets You Three Large Display Racks Free of Charge.

McGOWN-SILSBEE LITHO. COMPANY
124 Park Row, New York, U. S. A.
Specialty, Local Views printed to order from 100 up.

A book worth many dollars to any wide-awake pharmacist:

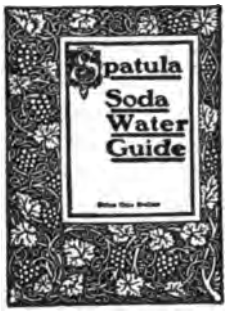
"Window Displays for Druggists."

You get it for one dollar. Full particulars in page advertisement elsewhere in this issue.

E. G. SWIFT, Publisher,

DETROIT, - - MICH.

BOOKS FOR PHARMACISTS.



THE SPATULA SODA-WATER GUIDE for many years has been recognized as the most exhaustive, most practical, and in every way the best book of the kind on the market. Entirely rewritten, brought thoroughly up-to-date. Its author, Mr. E. F. White, is recognized as the most accomplished soda-water expert in the world, and in his book are thousands of suggestions and formulas that are to be found nowhere else. About 200 large double-column pages, 9x6, bound in an attractive cover. Postpaid, $1.00 (Foreign 4s.); with SPATULA 1 year, $1.50 (Foreign 8s.).

HOW TO MAKE SHOW CARDS.—A practical treatise on the fundamental principles of artistic lettering with pen and brush for the use of retail merchants and their clerks, by Charles A. Miller. Fully illustrated with diagrams, alphabets, sample signs, etc. Heavy coated paper. The handsomest and most useful book on the subject published. 120 pages. Price, $1.00 (Foreign 4s.); with SPATULA 1 year, $1.50 (Foreign 8s.).

1000 WAYS AND SCHEMES TO ATTRACT TRADE.—This book is the result of over five years of observation and labor, and describes more than a thousand ideas that druggists and other tradesmen have successfully put into practice to increase their sales. Many of them have transformed losing businesses into profitable ones. Almost any one of them will bring you larger business and give you a bigger income. 208 pages 9¼x7 and 120 illustrations. Printed on the best of white paper and bound in a handsomely ornamented cover. Price, postpaid, $1.00 (Foreign 4s.); with the SPATULA 1 year, $1.50 (Foreign 8s.).

TOILET PREPARATIONS.—A treatise on the manufacture of Casein Massage Creams, Complexion Creams, Cold Creams, and Face Creams; Powders, Toilet Lotions, Camphor Ices, Bath Tablets, and other similar preparations, including hundreds of the latest and best formulas. Compiled and edited by L. W. Marshall. Price, postpaid, 50 cents (Foreign 2s.); with THE SPATULA 1 year, $1.25 (Foreign 6s.).

SPATULA HERB BOOK.—A classified list of medicinal herbs, giving botanic names and common names, with properties of each. A concise and practically complete list. Arranged alphabetically under both the scientific and common names, so any herb may be instantly found. Price, 50 cents (Foreign 2s.); with SPATULA 1 year, $1.25 (Foreign 6s.).

ONE THOUSAND FORMULAS.—A compilation giving the practical working druggist full information about the making of one thousand of the most common and salable preparations by L.W. Marshall. Price, 75c. (3s.); with SPATULA 1 year, $1.35 (7s.).

SPATULA VETERINARY FORMULARY.—A collection of practical formulas for all diseases common among horses, cattle, swine, poultry and dogs, by L. W. Marshall. 50 cents (Foreign 2s.); with SPATULA 1 year, $1.25 (Foreign 6s.).

SPATULA CUT CATALOGUE.—12th edition. The best collection of half-tone and line cuts for advertising and illustrating purposes in the world. Thousands of beautiful illustrations. Price, 50 cents (2s.); with SPATULA 1 year, $1.25 (Foreign 6s.).

100 ILLUSTRATED ADS.—A collection of 100 illustrated ads and a catalogue of hundreds of cuts, all designed especially for druggists, 50 cents (Foreign 2s.); with SPATULA 1 year, $1.25 (Foreign 6s.).

☞ *Send 2-cent stamp for Spatula Soda Girl in colors on cardboard, sample copy of Spatula and catalogue of books.*

THE SPATULA, 2 SUDBURY BUILDING, BOSTON.

A PRETTY WEDDING.—The marriage is announced of Miss Estelle E. McIntyre, president of the McIntyre Drug Company, Jackson, Miss., to Preston J. Fife, a member of the Mississippi Board of Pharmaceutical Examiners. The ceremony took place in the Methodist Church, which had been beautifully decorated for the occasion. A host of friends attended the wedding. Later the couple left for a short honeymoon trip to Meridian, Chattanooga, Cincinnati, Detroit, Canada, thence home by way of Chicago.

WHENEVER you sell a customer a package of stationery, just inquire whether he needs any ink. A bottle of Higgins' ink and a box of nice stationery go hand in hand. Often both can be included in the same sale. For prices on Higgins' writing fluids, write to Charles M. Higgins & Co., 271 Ninth Street, Brooklyn, N. Y.

"YOU can't tell me there is no honesty in the world."

"How now?"

"I left a box of cigars somewhere the other day. Somebody found it, smoked one, and returned the rest."—*Kansas City Journal.*

A VALUABLE WORK.—Some time ago we conceived the idea of paying a dollar for every good idea acceptable for publication. We were looking for practical information, for suggestions that cannot be found in books. We wanted those money-making and time-saving methods that can be learned only by experience. Having collected 350 of these ideas, we now offer them in book form for a dollar. The title is "350 Dollar Ideas for Druggists." Don't you want a copy? You can get one by remitting one dollar to E. G. Swift, Publisher, P. O. Box 484, Detroit, Mich.

AN "aviatress" is a woman who travels about in an aeroplane. She is called that for a time, and then referred to as "the deceased."—*Louisville Courier Journal.*

SHE: "If fashion makes our dresses any skimpier, I really don't know what we women will do."

He: "I do; you'll wear the dresses."—*Boston Transcript.*

ONE feature of the Wilmarth show cases that will appeal to our readers is their great variety. When one considers that there are 40,000 druggists in the United States he will get some idea of the many fixtures that the manufacturer must carry to meet the needs of different dealers. The Wilmarth Show Case Co. of Grand Rapids, Mich., is a large concern that carries a wide assortment of show cases. It can sell you one suited to your own individual needs. Any druggist who contemplates the purchase of new fixtures will do well to look over a Wilmarth catalogue before buying. Write for a copy. The Wilmarth company will send it for the asking.

FROM A CONTEMPORARY.—*The Gazoogalum* is a college paper published by the students of the University of Illinois School of Pharmacy. Full of chaff and good-natured jest, it must provoke a lot of fun among the boys. Here are a few lines of josh that appeared in the paper:

Prof. Goodman: "The new way to separate the cork is to boil the cork bark in water."

Bright Student: "I wonder how he is going to keep the cork covered with water?"

Prof. Gathercoal: "What are the properties of this drug?"

Van N., suddenly waking up, arose and asked, "What drug?"

Too bad to have to wake him up!

Prof. Clark, to Snyder, as soon as he came into the Chem. Lab. one morning: "Mr. Snyder, you have the honor of contributing the first fine of twenty-five cents for leaving your suction pump running all night."

Snyder: "Well, why didn't you shut it off for me?"

"Say," can any one find out where the Seniors get those "pretcells" and "popcorn"?

AN ATTRACTIVE OFFER.—Our readers may have noticed the offer of The Richmond & Backus Co., of Detroit, in this issue. The Are-and-Be Detachable Leaf Ledger-Journal and Monthly Statement Book may now be had at $18.75. The total regular price of the outfit is $24.50.

The Are-and-Be ledger, as we have pointed out in the BULLETIN before, eliminates the task of making out monthly statements. All sales are entered in duplicate by means of a sheet of carbon paper. The dealer mails one copy to the customer as a bill of account, while he retains the other as a record of the transaction. There is no transcribing, no making out of statements, and no errors. The druggist escapes the necessity of making out bills, which is itself enough to commend the system. Further particulars about the Are-and-Be ledger may be had by writing The Richmond & Backus Co., of Detroit. Some may find it convenient to communicate with the New York agency of this firm, 706 Columbia, Bldg., 29 Broadway. The Cleveland office is 822 Citizens' Bldg.

"WHAT is your favorite flower, Duke?" asked the heiress. "But I ought to know that without asking."

"Well, what should it be?"

"The marigold."—*Kansas City Journal.*

POND'S EXTRACT COMPANY'S VANISHING CREAM is an elegant toilet preparation. Quotations may be had by writing the selling agents, Lamont, Corliss & Company, 131 Hudson Street, New York.

YOUNG LAWYER: I haven't lost a case yet!

Friend: Oh, you'll get a client some day.

Would You Let Your Clerks Make Change Out of Your Pockets?

Of course you wouldn't. But is it really any different for you to let anywhere from one to a dozen people handle money in your cash drawer without any kind of check?

If your clerks had to go up and make change out of your pockets you would at least know when they came, and might have a chance to see if they made change correctly. But when you simply throw open your cash drawer to everyone, you have absolutely no check at all.

Is this good business? You probably keep a careful check on the goods that come into your store and the goods that go out. You insure your stock on your shelves, but with an open cash drawer, you place no insurance on the money for which you sell those goods.

A Michigan No. 6 Total Adding Cash Register will give you a check on all the money that comes into your store. It will protect your profits. It will insure your getting all that is coming to you. It will protect your clerks from mistakes and temptation. If you stop for a minute to think, you will realize that you need one of these registers. Perhaps you have long wanted to buy a cash register, but high price has prevented you.

Now, by purchasing a Michigan No. 6, you can secure a thoroughly high-grade register with modern improvements, at the low price of $75. No other Total Adding Cash Register in the world of equal registering capacity can be bought for less than $100. And even at that price, you can't get as well-made a register as this.

Don't put off buying. You will need a register for the holiday trade. You will need every convenience you can get to help take care of the Christmas rush. Place your order now and secure immediate delivery. You can place your order with your jobber's salesman. When he calls on you, ask him about the Michigan Cash Register. If he doesn't handle them write us direct and give us his name.

We also make detail adders, ranging in price from $20 to $50. If you want a lower priced register than our No. 6, one of these will interest you.

Send coupon to-day for new catalog P 12.

MICHIGAN CASH REGISTER COMPANY, Detroit, Mich.

Michigan Cash Register Co., Detroit, Mich.

Please send Catalog P 12 and prices of Michigan Cash Registers.

My Jobber's Name is _____

Name _____

Address _____

BOOSTING YOUR CIGAR BUSINESS

will help your business generally. Get the smokers coming your way by displaying your cigars in the

Silent Salesman **All-Glass Show Case**

Smokers will go blocks out of their way just to buy where their cigars are kept well and nicely displayed.

The clear plate glass, without frame, screw, clamp or angle, is the only thing between the goods and the customer's eyes. Our moistening arrangement insures cigars always in the best condition. That's a combination that will get the smoker's eye, open his pocketbook and hold his trade. Get this case, if you want to double your cigar business.

Write us for anything you wish to know about show cases. Our new booklet, "The Value of Display," sent free on request. Address Dept. E.

DETROIT SHOW CASE CO.

Show Case Makers to Progressive Merchants,
476-490 West Fort St., - - DETROIT, MICH.
New York Salesroom, 738 Broadway,
Leo A. Feldman, Selling Agent.

Get our Book on Modern Store Front Construction.

Quicken Your Sales

BY USING QUALITY CARDS

Local View Post Cards

MADE TO ORDER

Made from any good photo. Delivered in two to three weeks.

Hand Color Cards $6.75 per 1000
Most beautiful cards made in America.
Blue Delft Cards (2 colors) **$5.00 per 1000**
SEND FOR SAMPLES.
We Make High-Grade Calendars.
The National Colortype Co., Cincinnati, O.

How "Baby Ruth" Cleveland Helped Mark Twain.—Clemens was in good standing at Washington during the Cleveland administration, and many letters came, asking him to use his influence with the President to obtain this or that favor. He always declined, though once—a few years later, in Europe—when he learned that Frank Mason, Consul-general at Frankfort, was about to be displaced, Clemens, of his own accord, wrote to baby Ruth Clevland about it:

"My Dear Ruth—I belong to the Mugwumps, and one of the most sacred rules in our order prevents us from asking favors of officials or recommending men to office; but there is no harm in writing a friendly letter to you and telling you that an infernal outrage is about to be committed by your father in turning out of office the best consul I know (and I know a great many) just because he is a Republican and a Democrat wants his place."

He went on to recall Mason's high and honorable record, suggesting that Miss Ruth take the matter into her own hands. Then he said:

"I can't send any message to the President, but the next time you have a talk with him concerning such matters I wish you would tell him about Captain Mason and what I think of a government that so treats its efficient officials."

Just what form of appeal the small agent made is not recorded, but by and by Mark Twain received a tiny envelope, postmarked Washington, enclosing this note in President Cleveland's handwriting:

"Miss Ruth Cleveland begs to acknowledge the receipt of Mr. Twain's letter and say that she took the liberty of reading it to the President, who desires her to thank Mr. Twain for her information, and to say that Captain Mason will not be disturbed in the Frankfort consulate. The President also desires Miss Cleveland to say that if Mr. Twain knows of any other cases of this kind he will be greatly obliged if he will write him concerning them at his earliest convenience."—Albert Bigelow Paine in *Harper's Magazine.*

One thing that commends the Druggists' Indemnity Exchange to the pharmacists of this country is the promptness with which the concern settles claims. Subscribers who have sustained a loss by fire are indemnified as soon as possible. Only recently the store of C. M. Nagle of Plainfield, N. J., went up in smoke, but he had his money back ten days after the conflagration. The Druggists' Indemnity Exchange, with whom he carried insurance, sent him a check for over three thousand dollars. Pretty nice! It only goes to prove it pays to take out insurance and carry it in a good company. Any of our readers who contemplate taking out a policy with the Druggists' Indemnity Exchange can learn about the rates by writing the attorney and manager, H. W. Eddy, St. Louis, Mo.

'Henry, here's a hair on your coat!"

"Yes, dear, it's one of yours."

"But it's a blonde hair, and my hair is black."

"I know, dear, but you must remember I haven't worn this coat before in a month."—*Yonkers Statesman.*

UNIVERSITY OF MICHIGAN SCHOOL OF PHARMACY NOTES.—The following appointments have been made by the faculty for the present school year: A. F. Schlichting, Graduate-assistant in Pharmacy; C. H. Rogers, Student-assistant in Pharmacognosy; M. J. Seeley, Student-assistant in Food and Drug Analysis; C. C. Glover and N. B. Lawrence, Student-assistants in Pharmacy.

Dean J. O. Schlotterbeck gave a very interesting and instructive illustrated lecture before the class in Household Chemistry the early part of the month, the subject being "Necessities for and Benefits of Food and Drug Legislation."

The present year promises to be one of the most successful for the Prescott Club. A smoker has already been held at the Michigan Union for the purpose of getting the new men acquainted with each other and with the upper class men. Smokes, cider and doughnuts, and music by the Prescott Club orchestra were the events of the evening. The following are the officers for the first semester: D. K. Strickland, Kalamazoo, Mich., president; C. C. Glover, Ann Arbor, vice-president; J. M. Noble, Jackson, Mich., secretary; E. G. Wilkinson, Ann Arbor, treasurer; N. B. Lawrence, Red Oak, Iowa, reporter.

EVERY druggist must ask himself at times: "Am I doing all I can to increase my business?" Perhaps he makes a few attempts at advertising and then gives it up, discouraged by the difficulty of the work or maybe for lack of time. Here is where the Manning Advertising Service comes to the rescue of an enervated business. It writes the advertising for a store. It designs the window displays. It gets out circulars and letters that build up a drug business. The promotion work, instead of suffering utter neglect or receiving half-hearted support, is executed in high-class style. Find out about this institution. Full particulars can be obtained by writing the Manning Advertising Service, 313 North Ninth Street, St. Louis, Missouri.

THE SALESMAN.

The hotel bus from the midnight train
Brought only one passenger through the rain—
A salesman, tired, weary and sad,
For he had toiled all day, and trade was bad.

Not a single contract was in his book,
The disgust he felt was shown in his look;
With a careless hand he wrote his name
On a page of the book unknown to fame.

The drowsy clerk the signature scanned,
Then a letter placed in the salesman's hand.
Ah! see how he starts, while a smile of delight
Comes o'er his face at the welcome sight.

Thus clouds of despair that will ever appear
To a salesman, sometimes in the year,
Are often dispelled by such simple means
As one friendly letter. How queer it seems.

So wives, sweethearts, managers, chums,
If you know where we'll be when Sunday comes,
Write to us there if your time will permit,
Draw on us at sight, and we'll remit
"OUR THANKS."

CHAUFFEUR: Is there an ordinance limiting the speed of autos in this town?

Native: Gawsh, no! You fellers can't git through Squashville any too quick fer us.—*Boston Transcript.*

Finest French Olive Oils

GROWN, PRESSED AND PACKED BY

LAUTIER FILS

Grasse, France.

If you have used Olive Oil for some time you will have acquired a taste for Olive Oil and will easily discriminate between different qualities of Oils of different origin. It may not be that you will notice it at the first trial, but you will discover it when using more. Mr. Lautier Fils does not compound his Olive Oils from oils of different countries to save in price. He regulates his price according to the crop and according to the price the Olives cost him. If there is a bad crop, the price of the oil must be high. This gives the competitor a chance to come in with his cheaper grades and with the claim that they still sell at the old price. Reject this, because you will pay more to him than you do for the Lautier Oil. It will be an expensive experience.

GEORGE LUEDERS & CO.

Wholesale Agents

NEW YORK CHICAGO SAN FRANCISCO

OUR NEW

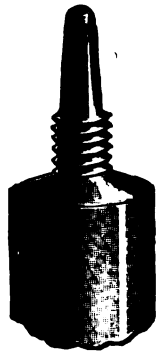
Plug Sprinkler

Is Absolutely LEAK PROOF

Neat in appearance, Simplest Construction of any sprinkler on the market.

COLLAPSIBLE TUBES

for all purposes for which tubes are used.



METAL SYRINGES,

SUPPOSITORY MOULDS,

Over 200 Shapes and Sizes.

HAND PILL MACHINES.

TIN SPOUTS

For Bug Poison.

ASK FOR SAMPLES PRICES CATALOGUE

A. H. WIRZ,

913-917 Cherry Street, PHILADELPHIA.

FREE

Picture Cards and Window Hangers.

They attract instant attention. They bring business. They are stunning pictures, lithographed in colors, prepared with the express purpose of helping the druggist sell

GOMBAULT'S CAUSTIC BALSAM

None genuine without the signature of
The Lawrence-Williams Co.
Sole Proprietors & Distributors for the U.S. & CANADA. CLEVELAND, O.

—"the best liniment for man and beast."

There is a series of these pictures, representing typical Southern scenes. They will rivet the attention of your customers. They will compel them to buy GOMBAULT'S CAUSTIC BALSAM, the best remedy in the world for curb, splint, sweeny, strained tendons—a capital liniment for mankind as well as for animals.

Write for the Cards.

We will send them to you free, express prepaid.

LAWRENCE-WILLIAMS CO.
1013-1017 Oregon Ave.
CLEVELAND, O.

Peroxide Zinc Soap

is "THE" true Peroxide Soap

because

it is made with Peroxide of Zinc.
Peroxide of Zinc is stable and does not decompose in a soap before its use

Therefore:

Specify Peroxide Zinc Soap R. & H. in order to have a soap with Peroxide Qualities.

The Roessler & Hasslacher Chemical Co.,

100 William Street, New York.

THE friend had dropped in to see D'Auber, the great animal painter, put the finishing touches on his latest painting. He was mystified, however, when D'Auber took some raw meat and rubbed it vigorously over the painted rabbit in the foreground.

"Why on earth did you do that?" he asked.

"Why, you see," explained D'Auber, "Mrs. Millions is coming to see this picture to-day. When she sees her pet poodle smell that rabbit, and get excited over it, she'll buy it on the spot."—*Ladies' Home Journal.*

KNOWLEDGE PERPETUATED.—When a skilled physician dies, it is lamented that he takes his skill with him. The pharmacist, too, on leaving this earth often carries along with him a store of technical knowledge that he has been a lifetime accumulating. Now in "350 Dollar Ideas for Druggists" we have perpetuated a lot of valuable material that could have been saved in no other way. We have brought together in this work hundreds of valuable ideas that make for ease, economy and better business in the pharmacy. There are dispensing hints and selling suggestions without number. The price of the book is only $1.00 post-paid. A copy may be had by remitting this amount to E. G. Swift, Publihser, P. O. Box 484, Detroit, Mich.

RAILROAD ATTORNEY: "You are sure it was our Flier that killed your mule? What makes you so positive?"

Rastus: "He dun licked ebry other train on de road."—*Puck.*

"How would you classify a telephone girl?" asked the old fogy. "Is hers a business or a profession?"

"Neither," replied the boob. "It is a calling."—*Washington Herald.*

A COMMON complaint among progressive druggists is: "I don't find time to write advertising." They realize the value of booklets, store papers and other literature of the kind, but haven't the time to produce them. Or for lack of practice in writing, they find it arduous to get up printed matter. Here is where the Druggists' Sales Service steps in. It specializes in that very work. It is devoted to advertising for the retail pharmacist. Wouldn't you like its assistance? There are any number of ways in which this concern can help you to do a better and bigger business. Write for particulars to the Druggists' Sales Service, 43 S. Fourth Street, Fall River, Mass.

WOMEN AND WAR.—If we women are to learn the fundamental things in life, we must educate ourselves and one another. And we few who are unfairly called educated because we have been to college must learn much and forget much, if we are not to appear as useless idlers to the millions of workingwomen in America. We women have to face questions that men alone have evidently not been quite able to solve. We must know why a woman who owns property has no voice in selecting the men who make laws that affect her property.

We must know why a woman who earns wages has nothing to say about the choice of the men who make laws that govern her wages. We must know why a hundred and fifty of our sisters were killed in New York in a shirt-waist factory fire the other day, and nobody to blame. We must know why our fathers, brothers and husbands are killed in mines and on railroads. We women, who are natural conservationists, must find out why the sons we bring forth are drawn up in line and shot. We must organize with our more enlightened brothers and declare a general strike against war. My father was a Confederate soldier, and I respect soldiers. But I grow more and more suspicious of the political powers that take men away from their work and set them shooting one another. Not all the military poems that I have read have roused in me an heroic desire to welcome my brother home with a bullet in his heart. We women have the privilege of going hungry while our men are in battle, and it is our right to be widowed and orphaned by political stupidity and economic chaos. To be sure, we are not allowed to vote for or against the congressman who declares for war; but we can instruct ourselves unofficially in these matters.—HELEN KELLER in the *Metropolitan*.

EVERY proprietor enjoys a handsome pharmacy just as much as he does a pretty home. But beautiful show cases have a further purpose than merely to gratify the esthetic sense of the owner. They bring business. They attract attention to the goods and convert the casual onlooker into a buyer. The Saginaw Show Case Co., Ltd., of Saginaw, W. S., Michigan, makes a line of high grade fixtures that will appeal to the drug trade. A catalogue will give you some idea of their appearance. Write for one.

"JOHANNA, please go to the pawnbroker's and pawn my gold watch. The poor man, I understand, is not getting much business, and I think we should help him along!"—*Fliegende Blätter.*

CREDIT WHERE CREDIT IS DUE.—Ralph W. Ashcroft, writing in the *C. R. D. A. News,* pays a tribute to Horlick's Malted Milk as a soda beverage. He says in part: "On every drink of 'Horlick's' served at the soda fountain there is from 100 to 150 per cent net profit to the druggist. We all admit that Horlick originated malted milk, and, furthermore, that it was his idea that malted milk would be an excellent thing to serve at soda fountains. When he first proposed 'Horlick's' as a soda fountain drink, the suggestion of selling 'baby food' at the fountain was laughed at. To-day, it is the leader."

"THERE isn't one man in a million who would be so mean to his wife and children as you are," remarked the wife, bitterly.

"Now that's what I admire in you, dear," ventured the husband, slowly; "you have such a head for figures." —*Harper's Magazine.*

Show Cases Like This

Will Make Sales For You.

We make six separate and distinct lines of show cases and have a case to fit every requirement and every pocket-book.

Our catalog contains many illustrations of stores which we have recently equipped, as well as a complete description of our show cases. A copy of it will be furnished on request.

LET YOUR DECISION BE IN FAVOR OF

Wilmarth

FIXTURES.

Wilmarth Show Case Co.

1520 Jefferson Ave., Grand Rapids, Mich.

NEW YORK SALESROOMS, 783 Broadway.
PITTSBURGH SALESROOMS, 7th Fl. House Bldg.
MINNEAPOLIS SALESROOMS, 100 Kasota Bldg.
SAN FRANCISCO SALESROOMS, 515 Market St.
CHICAGO SALESROOMS, 233 W. Jackson Blvd.
ST. LOUIS SALESROOMS, 1118 Washington Ave.
BOSTON SALESROOMS, 21 Columbia St.
TAMPA SALESROOMS, 206 Zack St.

REALIZE YOUR AMBITION

TO OBTAIN AN EDUCATION IN

PHARMACY

We offer a course of study in the elements of Pharmacy, prepared expressly for correspondence instruction, by OSCAR OLDBERG, PHARM. D., Dean of Northwestern University School of Pharmacy, Chicago. It is the strongest course that can be constructed for home students, and is offered with the assurance that any person who is competent to begin the study of Pharmacy can be prepared by us as well as by any other means to pass State Board examinations.

The course prepared by Dr. Oldberg covers 27 extended divisions; the last three are based upon the Pharmacopœia of the United States, which book is given to every student in addition to the volume containing the correspondence lessons. In the course unnecessary detail is eliminated, but the text is sufficiently clear and explicit to prepare the student adequately for his examinations. Recitation papers are corrected with greatest care and are returned to the student accompanied by printed answers to test questions. These answers furnish valuable side-lights upon the work, as they indicate how author and instructors would answer their own questions.

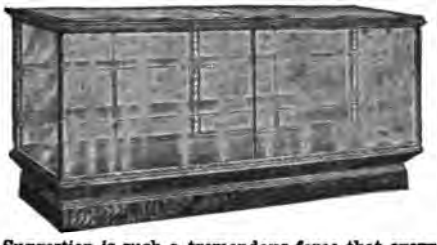
Graduates in our Academic Courses may receive entrance credits in Northwestern University. Advanced credits are also given in various State Normal Schools and colleges of high rank. This connection should give students fullest assurance that instruction in all courses is on a high plane.

Write for circulars giving full information.

Interstate School of Correspondence

633-641 South Wabash Ave., Chicago, Illinois.

The Power of Suggestion



Suggestion is such a tremendous force that every merchant should make the most of it. Don't wait for your customer to **ask for** a certain article—**suggest it to her.**

Displays are nothing more or less than Suggestion. But displays look better and **are** better when arranged in **"Quincy Special" Cases**

The goods are protected from dust, flies and handling; and the cases themselves enhance the appearance of the store, lending beauty, dignity and refinement.

You'll be pleased with "Quincy Special" cases, for they'll give you better service, dollar for dollar, than any other case you might buy. We make them in many different styles, suitable for all surroundings. We also manufacture other store fixtures that are worth investigating.

Write for our Catalog No. 20.

QUINCY SHOW CASE WORKS

QUINCY, ILLINOIS

CHICAGO: Jackson Blvd. and Franklin St.
ST. JOSEPH, MO.: 313-23 S. 3rd Street.
JACKSONVILLE, FLA.: 20-28 Julia St.
WICHITA, KANS.: 301 Beacon Building.
DALLAS, TEX.: 907 Commerce St.

SAFE FIRE INSURANCE

The several kinds of Fire Insurance may be classified as

Safe---Reasonably Safe--Unsafe

Every Insurance Company or Concern, whether Safe, Reasonably Safe, or Unsafe, will issue a policy to you. Such policy is a printed piece of paper. It may have value or it may not. Its value depends largely upon what the Company or Concern has, to back it up with.

We are the only Capital Stock Druggists' Fire Insurance Co. in existence. We have a Surplus as to Policyholders of nearly $300,000.00. *We are under the Supervision of 31 State Insurance Departments.*

We publish our financial condition.
We sell the very best Fire Insurance at the lowest consistent price.

Write to

The American Druggists' Fire Ins. Co.

1215-16 Mercantile Library Bldg.

CINCINNATI, OHIO.

Ask Your Jobber for Prescription

TREFOIL M TRADE MARK

CORKS

TREFOIL B TRADE MARK

MANUFACTURED BY

R. W. McCready Cork Company,

CHICAGO, ILL.

"BANG!" went the rifles at the maneuvers. "Oo-oo," screamed the pretty girl—a nice, decorous, surprised little scream. She stepped backward into the surprised arms of a young man.

"Oh," said she, blushing. "I was frightened by the rifles. I beg your pardon."

"Not at all," said the young man. "Let's go over and watch the artillery."—*Cincinnati Times-Star.*

THE beautiful displays in the large mercantile stores only go to show how window trims are regarded by modern business men. They are trade-winners. They attract buyers. Wouldn't it pay you to give more attention to that department of your store? We have a book devoted to window exhibits that will be of much help to you. It is entitled "Window Displays for Druggists." It contains over a hundred trims with full description and ample illutsrations. The price is only $1.00 postpaid. Remit to E. G. Swift, Publisher, P. O. Box 484, Detroit, Mich.

THERE were some celebrated pictures of Adam and Eve on exhibition, and a professional gardener was taken in to see them.

"I think not much of the painter," said he. "Why, man! tempting Adam wi' a pippin of a variety that wasna known until about twenty years ago."—*Harper's Bazar.*

CRÊME ELCAYA

and all ELCAYA preparations can be obtained through the leading Wholesale Druggists at

$4.00 A DOZEN

SPECIAL DISCOUNT

on 3 doz. quantity through Jobber

For Particulars write

JAMES C. CRANE

Sole Agent

108 FULTON ST., NEW YORK CITY.

JAPANESE POST CARDS

Drug and stationery stores make big profit selling our artistic Japanese Post Cards. Send $1.00 for 150 sample cards. Retails at 5 cents each. This is an actual fact, proven time over and again by thousands of dealers the country over. We ship express or postage prepaid.

CENTRAL POST CARD CO., BOX 594, CHICAGO.

Genuine Photo View Cards

Made from any size photo or card at $1.50 per 100. Send trial order or ask for samples. Two weeks delivery.

D. J. DU SAAR, HOLLAND, MICH.

CHAUFFEUR'S COMPLETE OUTFIT SACRIFICED. Consisting of elegant marmoset fur-lined coat, Persian lamb collar, $35; pair of elegant cub-bear robes, $15 each; raccoon cap, $5; pair of fur gloves, $4; pair of goggles, 50 cents; pair of leather leggings, $3.50. Will sell separately or the lot; all new, never worn; original price, $175.

G. CHASE, 118 East 28th St., New York.

LITTLE JACK, aged five, had accompanied his mother on a trip to the city.

When the conductor came around to collect the fares he asked the usual question:

"How old is the boy?"

After being informed the correct age, which did not require a fare, the conductor passed on to the next person.

The lad sat quite still, apparently pondering over something; then, concluding that full information had not been given, he called loudly to the conductor at the other end of the car:

"And mother's thirty-five!"—*Harper's Bazar.*

"So HE took you out auto riding the other evening?"

"Yes; what of it?"

"Do you think he is in love with you?"

"I think so. I know that every time I spoke to him the auto tried to climb a tree or jump a fence."—*Houston Post.*

SERVICE

is the key-note of modern selling.

SERVICE

has always been the key-note of

SUCCESSFUL selling.

LET THE

Druggists' Sales Service

help improve YOUR SELLING SERVICE—it will do it.

THE DRUGGISTS' SALES SERVICE

Company are advisors to druggists; business builders who have made a special study of drug store management; advertising writers who specialize in druggists' lines; publishers and printers of house organs, store papers and broadsides for druggists.

Write for complete outline of service plan, proposition and booklet and other sample material.

DRUGGISTS' SALES SERVICE,

43 S. Fourth St., - Fall River, Mass.

GLYCO-THYMOLINE

Trade-Mark

Registered in U. S. Patent Office.

In use seventeen years.

This Trade-Mark is the Property of

KRESS & OWEN COMPANY,

NEW YORK.

GASTROGEN TABLETS

A Neutralizing Digestive

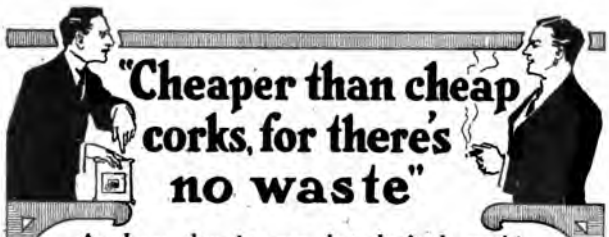
$4.00 Per Dozen

Through Jobbers.

BRISTOL-MYERS CO.

277-281 Greene Ave.

Brooklyn-New York, U. S. A.



"Cheaper than cheap corks, for there's no waste"

An Iowa druggist says that that's been his experience with

Circle A Corks

Now it's true you do have to pay more for them than for the ordinary kind, since only about 2% of all the bark we get produces corks good enough to be classed as Circle A. But don't forget: you never have to throw away a single one, for every Circle A Cork is sound, strong and clean—as nearly perfect as it's possible to make them.

Why not give them a trial? Twenty cents in stamps will bring you a sample package containing 100—Nos. 2 to 6—by return mail. Send for it to-day—now—before you forget it.

Armstrong Cork Company

1313 Union Bank Building Pittsburgh, Pa.

CONSOLIDATED FRUIT JAR CO.

Manufacturers of the
ALLEN TELESCOPIC and KENT PATENT TOPS
for Cans and Tooth-powder Bottles.
Talcum Powder Tops.
Aluminum Collapsible Drinking Cups.

ALSO FULL LINE OF
Collapsible Tubes, Cast Metal Sprinklers, Soda Holders, Bitter Tubes, and all kinds of Sheet Metal Goods.

Sole Manufacturers of Drummond Patent Closed Tube.

Prices Furnished on Application.

Main Office,
New Brunswick, N. J.
New York Office,
290 Broadway

ESSENTIAL OILS

THE **D & O** BRAND

THE STANDARD OF QUALITY

Order from your wholesaler in original packages under our label and guaranty seal, 1 ounce and upward.

DODGE & OLCOTT CO.
NEW YORK

Whitney Glass Works

ESTABLISHED 1778.

Glass Bottle Manufacturers
FLINT AMBER GREEN

Also Manufacturers of
Machine Made Bottles
Narrow and Wide Mouth
by the
Celebrated "Owens" Process
which produces uniformity in
HEIGHT WEIGHT CAPACITY
Superior Bottles in Every Feature

OFFICES:
New York Philadelphia Chicago

FACTORIES AND HOME OFFICE:
GLASSBORO, NEW JERSEY

WANT ADVERTISEMENTS

STORES, FIXTURES AND APPARATUS FOR SALE,
HELP WANTED, SITUATIONS WANTED,
BUSINESS AND PROFESSIONAL CHANCES, ETC.

Rates.—25 words or less (one insertion), $1.00; each additional word, 3 cents; *cash with order.*
Copy should reach us before the 25th of the month to insure insertion in the next month's issue.

THE BULLETIN OF PHARMACY, Detroit, Mich.

WANTED.—Druggist familiar with advertising campaigns, window displays, etc., one capable of "gingering up" the trade and producing results. Excellent opening on Pacific Coast. Give qualifications, educational references, and salary wanted in first letter. Address B. F., care BULLETIN OF PHARMACY. 12

FOR SALE.—Only stock of drugs in growing interurban town surrounded by a rich farming community. A good opening for a good fellow. E. A. Shinn, North Liberty, Iowa. 12

FOR SALE.—Drug business at 65 per cent of inventory. Clean, salable stock, good location and business; $2400 makes deal. Bowe, Druggist, Toledo, Ohio. 12

WANTED.—Any salaried position with wholesale or retail drug firm where there would be an opportunity for advancement or investment if conditions proved satisfactory to both parties. Desire to remain in Michigan. Can give best references and service. Address F. H. J., care BULLETIN OF PHARMACY. 12

FOR SALE.—$3000 drug stock and fixtures located in West Texas county site of 750. No indebtedness; health reason for selling. Address J. M. M., care BULLETIN OF PHARMACY. 12

FOR SALE.—A good paying drug store in South Dakota. This is a snap and will pay you to investigate. Address V. L. Ferguson, Midland, S. D. 12

FOR SALE.—A Rexall drug store in New York town of 3000. Sales $9000. Will sell at inventory, about $5000—$3500 needed. Clean stock. Good reasons for selling. Rexall, care BULLETIN OF PHARMACY. 12

FOR SALE.—A good clean drug stock and store; stock about $4000; the only store in Minnesota town of 350. Business good; crops fine; it's a gold mine for a hustler. Address J. K., care BULLETIN OF PHARMACY. 12

FINE LOCATION FOR A DRUGGIST. I have a fine new store building with a very modern front. Only one such stock here. A thriving Michigan city. Address W. C., care BULLETIN OF PHARMACY. 12

FOR SALE.—Only stock of drugs in country town. Average sales $18.00 per day. Low expenses. Invoice $2000. Box 105, Haviland, O. 12

WANTED.—To sell a drug store in a small town, or I want a young German to learn the business. A splendid chance to begin. J. M. Maus, Proprietor Maus' Drug Store, Panama, Okla. 11

FOR SALE.—A first-class drug store. Elegant location, good business. Sell for cash or on payments. Address G. W. Irwin, Roachdale, Ind. 11

FOR SALE.—Drug store in best town of 10,000, railroad center, in western Washington. Good business, good corner, full prices. Take $6000 cash only. Do not answer if you do not mean business. L. M., care BULLETIN OF PHARMACY. 9

WANTED.—Position by pharmacist registered in Virginia, Maryland, and W. Virginia. Good references; age 30; no bad habits. Can register in other States. Address S. F. L., care BULLETIN OF PHARMACY. 11

FOR SALE.—Drug stock. Michigan town of 600. Sales $30 per day. Rent $12.50. Invoice about $4000. Full prices. Other business. Address O. K., care BULLETIN OF PHARMACY. 9

WE HAVE AN OPENING for some good drug man with about $3000 to start a new store. Good town, waterworks, five general merchandise, and numerous other business. Good farming country. Address Oklahoma, care BULLETIN OF PHARMACY. 10

PARTNER WANTED, with $1000 or $1500 capital, to join me in establishing drug store in small southern Michigan town. I have the building and some capital. Good opportunity for reliable, experienced druggist. Address J. I. M., care BULLETIN OF PHARMACY. 10

DRUG STORES FOR SALE (snaps); also jobs—all States. Physicians, veterinarians, dentists, and nurses furnished and located. F. V. Kniest, Omaha, Nebraska. Estab. 1904. 7

Specializing in the Preparations of Parke, Davis & Co. Means Profit, Prestige and Satisfaction.

It pays the druggist to carry a representative stock of the pharmaceutical and biological products of Parke, Davis & Co.; to be able to supply them promptly when called for; to dispense them on unspecified orders—to *specialize* in them, in short, so far as the exigencies of his business will permit. It pays in dollars and cents. It pays in professional reputation. It pays in personal satisfaction—the satisfaction which comes from dispensing preparations of definite medicinal worth.

◆ ◆ ◆

When he supplies a preparation of Parke, Davis & Co.'s on an order or prescription the pharmacist is in a position to give to his medical patron a positive guaranty of its therapeutic value. **This company's drug extracts; its tinctures; the components of its pills, tablets, syrups and elixirs; its serums and vaccines—in fact its entire output of pharmaceutical and biological products—are accurately tested and standardized:** chemically so far as practical, physiologically when the older method is inexpedient.

◆ ◆ ◆

The pharmaceutical and biological products of Parke, Davis & Co. are in universal demand by the medical profession. They are liberally advertised to physicians. They are of unquestioned quality. They are always acceptable when dispensed upon unspecified orders.

PARKE, DAVIS & COMPANY

Laboratories: Detroit, Mich., U.S.A.; Walkerville, Ont.; Hounslow, Eng.

Branches: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Minneapolis, Seattle, U.S.A.; London, Eng.; Montreal, Que.; Sydney, N.S.W.; St. Petersburg, Russia; Bombay, India; Tokio, Japan; Buenos Aires, Argentina.

A PRACTICAL BOOK:

"Window Displays for Druggists"

Edited by HARRY B. MASON,

"Editor of the "Bulletin of Pharmacy"

Special Features of the Book:

Engravings of 110 window displays.
Descriptions of 110 window displays.
A collection of pointed, pithy placards.
Practical chapters on window dressing in general.
Calendars suggesting articles for display every week in the year.

Note these facts also: Every window trim described in the book is illustrated by a photographic engraving, and, when necessary, by drawings showing the framework of the display. Every window was originally designed and successfully employed by some druggist. Every one applies directly to the druggist's needs, and as a whole they represent every article and line in his stock. All of them are prize windows selected from over a thousand sent in competition. These windows cost us five hundred and fifty dollars—you get them for one!

Contains 176 pages and bound substantially in cloth boards.
Sent post-paid for $1.00 in cash.

E. G. SWIFT, Publisher,

Detroit, Mich.

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AND RECORD

is a veritable boon to the practitioner of medicine. It provides a simple, efficient method of bookkeeping. It saves time. It prevents losses.

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The **Call List** is an admirable gift for your physician friends—a book which will be consulted many times every day and which will serve as a constant reminder of your store.

Every year we receive thousands of orders from druggists for copies of the **Call List** for presentation to their medical patrons. We would like to have *your* order. The cost is small and will be returned to you many times in increased prescription business.

PRICE TO THE TRADE, $1.50 EACH, LESS 25 PER CENT

Morocco bound, full gilt edges. Name of the physician, "Compliments of" and name of the druggist (or his pharmacy) embossed in gold free of charge.

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Box 484, DETROIT, MICH.

European Office: 19 and 20 Great Pulteney St., W., LONDON.

CURRENT PRICES

DRUGS, CHEMICALS, ETC.

CORRECTED TO DECEMBER 1.

The following quotations represent the average prices charged in the New York market for the quantities usually purchased by retail druggists. Smaller quantities will probably be invoiced at higher rates; the buyer of large parcels may obtain reduced quotations. Containers charged extra, unless otherwise specified; quantities of one ounce or less, containers included.

Acetanilide, bulk	per lb.	$0 30
1-lb. cartons incl	per lb.	32
1-oz. cartons incl	per oz.	7
Acetone, pure	per lb.	41
Technical	per lb.	34
Acetozone	½-oz. bottle.	1 40
	½-oz. bottle.	2 70
	1-oz. bottle.	5 25
Acetphenetidin	per lb.	1 27
Acid, Acetic, No. 8	per lb.	12
U. S. P. 36%	per lb.	12
60% pure	per lb.	13
chem. pure	per lb.	16
Glacial, com'l	per lb.	17
absolute	per lb.	20
	per oz.	12
Arsenous, Medicinal, lump (lb. 24)	per oz.	8
powd. (lb. 24)	per oz.	8
Benzoic, English, true, oz. vials	per oz.	22
oz. b	per oz.	19
German, 1-lb. cartons	per lb.	42
1-oz. cartons	per oz.	10
Boracic, cryst	per lb.	14
powd	per lb.	14
cryst., c.p., 1-lb. cartons incl.,	per lb.	25
powd., c. p., 1-lb. cartons incl.,	per lb.	25
Butyric, 60%	per lb.	80
Cacodylic, ½-oz. vials	per oz.	5 25
Camphoric	per oz.	34
Carbolic, crude 90%, bbls.	per gal.	33
90%, bbls.	per gal.	42
95%, bbls.	per gal.	60
liquid, med., 95%	per lb.	30
liquefied, com. [some times, but dangerou'y, called coal-tar creosote—see note under "Creosote"]	per lb.	22
pure white, loose cryst.	per lb.	45
white cryst., Calvert's No. 1,	per lb.	1 80
Mallinckrodt's Gold Label. 1-lb. bots.	per lb.	28
5-lb. bots.	per lb.	26
1-lb. cans.	per lb.	28
5-lb. cans.	per lb.	24
10-lb. cans.	per lb.	22
Chloracetic	per oz.	47
Chromic	per oz.	14
c. p	per oz.	18
Chrysophanic	per oz.	26
Cinnamic	per oz.	26
Citric	per lb.	50
powd	per lb.	50
Formic (sp. gr. 1.06)	per lb.	28
	per oz.	12
Gallic	per oz.	11
in 1-lb. boxes	per lb.	69
Hydriodic (sp. gr. 1.50)	per oz.	25
Hydrobromic, concen., 34%	per lb.	55
	per oz.	17
dil., U. S. P	per lb.	25
Hydrocyanic, U. S. P	per oz.	10
Hydrofluoric	per lb.	1 50
in ½-lbs	per lb.	2 00
in ¼-lbs	per lb.	2 75
	per oz.	37
for technical purposes in *lead* jugs	per lb.	10
Hydrophosphorous Sol., 50%	per lb.	1 00
	per oz.	19
Iodic, cryst	per oz.	97
Lactic, concent	per lb.	85
	per oz.	12
Molybdic, c. p	per lb.	2 75
	per oz.	28
pure	per lb.	1 40
	per oz.	17
Mono-chlor-acetic	per oz.	22
Muriatic, com'l	per lb.	4
in carboy	per lb.	1 2/5
c. p	per lb.	17
Nitric, com'l	per lb.	8
in carboy	per lb.	5½
Acid (*Cont'd*), Nitric, c. p	per lb.	$0 19
Nitromuriatic, c.p., U.S.P	per lb.	25
Oleic, purified	per lb.	30
Oxalic	per lb.	16
c p	per lb.	22
Phosphates	per gal.	1 00
Phosphoric, dilute, U. S. P	per lb.	15
conc., 50%	per lb.	30
syrupy, U. S. P	per lb.	40
Glacial	per lb.	55
	per oz.	12
Picric	per lb.	90
Pyrogallic, oz. tins	per oz.	18
¼-lb. tins	per lb	2 00
½-lb. tins	per lb.	1 90
1-lb. tins	per lb.	1 85
Pyroligneous	per lb.	12
	per gal.	45
Salicylic, 5- & 10-lb. bundles	per lb.	42
in 1-lb. boxes	per lb.	44
from Oil Wintergreen	per oz.	36
Stearic	per lb.	20
Succinic	per lb.	6 00
	per oz.	49
Sulphanilic	per oz.	17
Sulphuric, com'l	per lb.	4
in carboy	per lb.	1 2/5
aromatic	per lb.	50
c. p	per lb	16
Sulphurous, U. S. P	per lb.	15
Tannic, P.-W.-R. Co	per lb.	1 00
	per oz.	14
U. S. P., Mallinckrodt	per lb.	1 10
	per oz.	15
Tartaric, crystals	per lb.	41
powd	per lb.	42
Trichloracetic	per oz.	35
Valerianic	per oz.	35
Aconitine, Amorphous, ½-oz. vials,	per oz.	9 60
Adonidin, in 15-gr. vials	each.	2 25
Adurol	per oz.	60
Adeps Lanæ	per lb.	22
Agaric, white	per lb.	40
powd	per lb.	50
Agaricin	per oz.	79
in 15-gr. vials	each.	10
Agurin	per oz.	1 70
Airol (Bismuth Oxydiogallate Roche),	per oz.	70
Albumen, Egg	per lb.	35
Alcohol, U. S. P	per gal.	3 06
in 10-gal. lots inc	per gal.	2 91
	bbls.	2 70
amylic (Fusel oil)	per lb.	65
	per gal.	4 50
pure (Fusel oil)	per lb.	85
absolute	per pt.	70
deod	per gal.	3 00
in 10-gal. lots inc	per gal.	2 91
denaturised, in bbls	per gal.	42
in ½-bbls	per gal.	46
wood	per gal.	72
in bbls, net cash	per gal.	54
Allspice	per lb.	14
powd	per lb.	18
Almond Meal, white	per lb.	25
Almonds, shelled, bitter	per lb.	45
sweet	per lb.	35
Aloin, P. D. & Co	per oz.	16
	per lb.	1 50
Alphozone	per oz.	4 50
	per ½-oz.	2 20
	per ¼-oz.	1 20
in 1-grain tablets	per bot. of 90.	1 00
Alum, Ammonio-ferric	per lb.	25
chrome, 1-lb. cartons	per lb.	17
dried	per lb.	12
lump	per lb.	4
powd	per lb.	7
Potassium	per lb.	15
Pencils, plain	per doz.	1 40
mounted on wood	per doz.	3 50
Aluminum, metallic, powd	per lb.	1 25
	per oz.	13
Acetate, pure	per lb.	30
	per oz.	14
Sulphate, pure	per lb.	20
c. p	per lb.	50
Amidol	per oz.	55
Ammonia Water, 10%	per lb.	8
in carboy	per lb.	5
20%	per lb.	10
in carboy	per lb.	8
26%, in 1-lb. bottles	per lb.	15
in carboy	per lb.	10
Ammonium, Acetate, cryst	per oz.	14
Benzoate	per oz.	14
Bichromate	per lb.	45
Bromide	per lb.	62
	per oz.	12
Carbonate	per lb.	15
Carbonate, powd	per lb.	20
pure, cubes	per lb.	31
resublimed, pure	per lb.	25
Chloroplatinate, in 15-gr. vials,	each.	1 50
Citrate	per oz.	15
Ammonium (*Cont'd*) Hypophosphite,	per oz.	$0 20
Iodide	per oz.	33
	per lb.	4 50
Molybdate	per lb.	1 40
	per oz.	17
Muriate, gran., com'l	per lb.	12
c. p	per lb.	25
lump	per lb.	16
purified, 1-lb. cartons	per lb.	17
powd., 1-lb cartons	per lb.	18
Nitrate, cryst., fused, gran.	per lb.	27
Oxalate	per lb.	28
Persulphate	per oz.	14
Phosphate	per lb.	55
Salicylate	per oz.	12
	per lb.	80
Sulphate, com'l	per lb.	9
pure, resublimed	per lb.	18
Sulphocyanate	per lb.	60
	per oz.	12
Succinate	per oz.	64
Valerianate, cryst	per oz.	22
Ammonol	per oz.	1 05
Amyl Acetate (Banana oil), com'l,	per gal.	4 35
pure	per lb.	75
Valerianate (Apple oil)	per lb.	2 50
Nitrite	per oz.	25
Amylene Hydrate	per oz.	49
Aniline, Black (aniline salt)	per lb.	60
nigrosine, extra for ink	per lb.	2 00
Blue, cotton	per lb.	2 50
acid, navy	per lb.	2 50
methyl	per lb.	2 50
methylene medicinal	per oz.	60
Brown, acid, fast	per lb.	1 20
Bismarck	per lb.	75
Cardinal	per lb.	2 00
Eosine, yellow	per lb.	2 00
Fuchsine, red	per lb.	1 75
Green, emerald, extra cryst.	per lb.	2 00
malachite, Victoria	per lb.	1 50
Orange	per lb.	1 25
Red, Albany	per lb.	60
fast	per lb.	50
Scarlet, extra, L. R	per lb.	1 25
ordinary	per lb.	75
Violet, Hoffman's BBB	per lb.	2 00
red	per lb.	2 50
methyl, BB	per lb.	2 50
Yellow, lemon	per lb.	2 00
Annatto	per lb.	45
Annattoine	per lb.	70
Anodyne, Hoffmann's	per lb.	51
U. S. P	per lb.	50
Anthrarobin	per oz.	64
Antidiphtheric Serum,		
No. 0, 500 antitoxic units	per bulb.	88
No. 1, 1000 antitoxic units	per bulb.	1 50
No. 2, 2000 antitoxic units	per bulb.	2 62
No. 3, 3000 antitoxic units	per bulb.	3 75
No. 4, 4000 antitoxic units	per bulb.	4 87
No. 5, 5000 antitoxic units	per bulb.	5 62
Antifebrin	per oz.	17
Antikamnia, Powdered or Tablets,	per oz.	1 00
Antikamnia Combination Tabs.,	per oz.	1 00
in 10-oz. lots assorted to order		93½
Tablets, vest-pocket-boxes	per doz.	1 75
(in one-gross lots, $20.00.)		
Antikamnia Tablets, Laxative	per oz.	1 00
Antikamnia and Codeine Tabs.	per oz.	1 00
(4½ gr. antikam., ½ gr. sulph. codeine)		
Antikamnia and Heroin Tabs	per oz.	1 00
(5 gr. antikam., 1-12 gr. heroin hyd.)		
Antikamnia and Quinine Tabs.	per oz.	1 00
(2½ gr. antikam., 2½ gr. sulph. quinine)		
Antikamnia and Quinine Tablets, Laxative	per oz.	1 00
Antikamnia and Salol Tablets.	per oz.	1 00
(2½ gr. antikam., 2½ gr. salol.)		
Antikam., Quinine and Salol Tablets,	per oz.	1 00
(2 gr. antikam., 2 gr. quinine, 1 gr. salol.)		
Antikamnia (10 oz. assorted)	per oz.	93½
Antimony, black, powd., com'l	per lb.	8
(sulphuret) powd., pure,	per lb.	20
Chloride Sol	per lb.	22
Chlor., crystals	per lb.	1 20
	per oz.	19
Diaphoretic	per lb.	1 00
Metallic	per lb.	25
Oxide, white	per lb.	28
Tartrate and Potassium (see Tartar Emetic.)	per lb.	44
Antinosine	per oz.	2 10
Antimonia, in lb. cans	per lb.	85
Antipyrin, Knorr's	per oz.	31
New	per oz.	25
in lbs	per lb.	2 25
Antispasmin, in 15-gr. vials	each.	75
Apiol, crystals, white, 15-gr. vials,	per vial.	25
fluid, green	per vial.	50
Apolysin	per oz.	1 00

Apomorphia muriate, apomorphus, in ⅛-oz. vials....per oz. $2 80
Cryst., in ⅛-oz. vials.....per oz. 13 75
Areca Nut.....per lb. 15
powd.....per lb. 25
Arecoline Hydrobromate, 1-oz. vials.....per oz. 9 00
⅛-oz. vials.....per oz. 9 90
Argols, Red.....per lb. 12
powd.....per lb. 15
Argonin.....per oz. 65
Argyrol.....per oz. 1 50
Aristochin.....per oz. 2 20
Aristol (in 25-oz. lots, $1.65).....per oz. 1 80
Arrowroot, American.....per lb. 10
Jamaica (so-called Bermuda).....per lb. 25
St. Vincent.....per lb. 20
Taylor's, ¼'s.....per lb. 25
True Bermuda.....per lb. 50
Arsenic, Bromide.....per oz. 27
Solution.....per lb. 40
Chloride Solution.....per lb. 40
Mercury Iodide Sol'n. Donovan's, per lb. 24
Solution, Fowler's.....per lb. 15
powd., white.....per lb. 10
Iodide.....per oz. 42
Red Sulphide.....per lb. 25
Yellow Sulphide.....per lb. 25
Arseneous Iodides, U. S. P.....per oz. 47
Asbestos, fibrous, long.....per lb. 25
ground.....per lb. 10
Aseptol.....per oz. 26
Asparagin, in ⅛-oz. vials.....per oz. 1 50
Aspirin.....per oz. 43
Atropia, in ¼-oz. vials.....per oz. 6 00
Sulphate, in ⅛-oz. vials.....per oz. 4 50
Balsam, Copaiba, Angostura...per lb. 75
Central America....per lb. 70
Para.....per lb. 90
solidifiable.....per lb. 1 25
solidified.....per lb. 1 40
Fir, Canada.....per lb. 25
Oregon.....per lb. 30
Gunjun.....per lb. 50
Mecca.....per lb. 5 50
Peru.....per lb. 2 25
Sulphur.....per lb. 75
Tolu.....per lb. 1 75
Tranquille.....per lb. 75
Barium Acetate, 1-oz vials....per oz. 14
Carbonate, pure precip....per lb. 26
c. p. precip.....per lb. 20
Chloride (Mur.), c. p. cryst.per lb. 25
recryst per lb. 15
Hydrate, pure cryst.....per lb. 25
Iodide.....per oz. 59
Nitrate, powd.....per lb. 15
c. p.....per lb. 27
Oxide, pure hydrated.....per lb. 25
per oz. 10
Peroxide, anhydrous.....per lb. 30
Sulphate.....per lb. 12
pure precip.....per lb. 20
Sulphide, com'l.....per lb. 25
pure.....per lb. 42
per oz. 12
Bark, Alder, black.....per lb. 20
red or Tag.....per lb. 20
Angostura.....per lb. 50
Bayberry.....per lb. 18
powd.....per lb. 22
Bittersweet, of root.....per lb. 50
Buckthorn.....per lb. 20
cut.....per lb. 25
Butternut.....per lb. 20
Canella.....per lb. 20
powd.....per lb. 25
Cascara Sagrada.....per lb. 25
ground.....per lb. 20
Cascarilla.....per lb. 25
Cassia, in mats.....per lb. 12½
powd.....per lb. 15
Saigon.....per lb. 50
powd.....per lb. 75
Cherry.....per lb. 20
ground.....per lb. 22
Cinchona Calisaya Quill....per lb. 25
powd per lb. 42
Red, Quill.....per lb. 40
powd.....per lb. 45
Yellow.....per lb. 20
powd.....per lb. 25
Cinnamon, Ceylon.....per lb. 28
powd.....per lb. 40
Condurango.....per lb. 25
Coto.....per lb. 45
Cotton-root.....per lb. 25
Cramp.....per lb. 20
Elm, ground.....per lb. 20
powd.....per lb. 25
slab, in 5-lb bundles....per lb. 25
Hemlock.....per lb. 15
powd.....per lb. 20
Mezereon.....per lb. 20
Oak, white.....per lb. 15
powd.....per lb. 20

Bark (*Cont'd*), Pomegranate fruit, per lb. $0 25
bark of root.....per lb. 25
Poplar.....per lb. 15
powd.....per lb. 20
Prickly Ash.....per lb. 50
Quebracho.....per lb. 40
Sassafras.....per lb. 20
powd.....per lb. 25
Simaruba.....per lb. 20
Soap.....per lb. 16
ground.....per lb. 18
powd.....per lb. 20
Wahoo.....per lb. 60
White pine.....per lb. 20
Willow.....per lb. 15
Barley, Pearl.....per lb. 6
Robinson's, ½-lbs.....per doz. 1 50
1-lbs.....per doz. 2 50
Bath Brick, 2 doz. in case...per case. 80
Bay Rum, domestic.....per gal. 2 00
Imported.....per gal. 2 25
in ½ bbls.....per gal. 1 90
in 10-gal. kegs.....per gal. 2 00
Beans, Calabar.....per lb. 1 00
St. Ignatius.....per lb. 1 25
St. Johns.....per lb. 10
Tonka, Angostura.....per lb. 8 00
Vanilla, Bourbon, 6, 7, 8, 9-inch, per lb., $5 50 to 6 00
Mexican, No. 1, 6½ to 9-inch, per lb.. $6 50 to 6 75
Tahiti, 6 to 7½-inch...per lb. 3 25
Benzine.....per gal. 25
in bbls.....per gal. 12
purified, U. S. P.....per lb. 45
Benzole, pure.....per lb. 17
Benzonaphthol.....per oz. 27
Berberine, carbonate.....per oz. 5 00
hydrochlor., P. D. & Co....per oz. 2 50
phosphate, P. D. & Co.....per oz. 3 00
sulphate, P. D. & Co.....per oz. 3 00
Berries, Buckthorn.....per lb. 25
Cocculus Ind.....per lb. 12
Cubeb.....per lb. 65
powd.....per lb. 70
Juniper.....per lb. 12
ground.....per lb. 14
Laurel.....per lb. 12
Poke.....per lb. 25
Prickly Ash.....per lb. 50
Sumac.....per lb. 18
Betol.....per lb. 60
Bismuth and Ammonia Citrate.per oz. 27
Benzoate.....per oz. 25
Beta Naphthol (Orphol)...per oz. 25
Citrate.....per oz. 27
Liquor.....per lb. 28
Metallic.....per lb. 2 75
Oxide, hydrated.....per lb. 3 60
per oz. 88
Oxychloride.....per lb. 2 77
Salicylate, 64%.....per oz. 26
Subcarbonate.....per lb. 2 88
Subgallate.....per lb. 2 27
Subiodide.....per oz. 39
Subnitrate, U. S. P.....per lb. 2 12
P.-W.-R. Co.....per lb. 2 12
Tannate.....per oz. 27
Valerianate.....per oz. 26
Bladder Wrack.....per lb. 25
Blue Mass, powd.....per lb. 62
U. S. P.....per lb. 58
Soluble, Tieman's...per lb. 45
Vitriol.....per lb. 9
in bbls.....per lb. 5¾
powd.....per lb. 15
c. p.....per lb. 28
Borax, calcined.....per lb. 40
powd.....per lb. 8
c. p. cryst. or powd.....per lb. 20
refined.....per lb. 8
Bois, Armenian.....per lb. 10
Bone Ash.....per lb. 15
Bone, Cuttlefish.....per lb. 35
powd.....per lb. 25
Jeweler's.....per lb. 50
Boroglycerin.....per lb. incl. 1 00
50% solution.....per lb. 50
Breast Tea.....per lb. 25
Brimstone, Roll.....per lb. 4
in 50-lb. lots.....per lb. 3
in bbls.....per lb. 2½
Bromal Hydrate.....per oz. 1 50
Bromine.....per lb. 65
per oz. incl. tin and vial. 20
Trichloride, 1-oz. vials and cans, per oz. 60
Bromoform.....per oz. 18
Bromopin.....per oz. 18
Brucine, pure or sulph., ⅛-oz. vials, per oz. 1 50
Buds, Balm Gilead.....per lb. 50
Cassia.....per lb. 40
Cacao Butter.....per lb. 50
Barker's Rolls, 40 in box..per box. 1 60
Cadmium Bromide.....per oz. 17
per lb. 1 20
Chloride.....per oz. 21

Cadmium (*Cont'd*) Iodide.....per oz. $0 30
per lb. 4 50
Metallic.....per lb. 1 25
Nitrate.....per oz. 20
Sulphate.....per oz. 19
Caffeine (Theine), pure.....per oz. 4 25
1-oz. cartons..per oz. 24
Acetate, ⅛-oz. vials .....per oz. 60
Benzoate, 1-oz. vials.....per oz. 25
Bromide, 1-oz. vials .....per oz. 45
Citrated, 1-oz. vials.....per oz. 27
per lb. 2 70
Hydrochlorate, 1-oz.vials...per oz. 45
Nitrate, 1-oz. vials.....per oz. 75
Salicylate, 1-oz. vials.....per oz. 45
Sulphate, 1-oz. vials.....per oz. 45
Valerianate, 1-oz. vials.....per oz. 45
and Sodium Benzoate.....per oz. 40
Salicylate.....per oz. 45
Calamine (light or dark).....per lb. 25
Calcium Benzoate.....per oz. 19
Bromide.....per oz. 13
per lb. 60
Carb. precip.....per lb. 22
Carbide.....per lb. 20
Chloride, fused, anhyd.....per lb. 55
or gran.....per lb. 19
Com'l for automobiles..per lb. 3 to 6c
Glycerophosphate.....per oz. 20
Hypophosphite.....per lb. 50
Iodide.....per oz. 42
Lactate.....per oz. 10
per lb. 75
Lactophosphate.....per oz. 16
Peroxide.....per lb. 1 50
per oz. 24
Phosphate precip., 1-lb. cartons, per lb. 19
U. S. P., 1-lb. cartons..per lb. 45
Salicylate.....per oz. 19
Sulpho-carbolate.....per lb. 52
per oz. 11
Calomel, American.....per lb. 1 25
English.....per lb. 1 50
Camphor.....per lb. 55
in ¼-lb. squares.....per lb. 56
in ¼-lb. squares, cases 100 lbs., per lb. 47
in 1-oz. blocks.....per lb. 57
in bbls.....per lb. 45
powdered.....per lb. 67
Monobromated.....per oz. 20
per lb. 1 25
Candy, Rock, on strings.....per lb. 15
Cantharides, Chinese.....per lb. 50
powd.....per lb. 60
Russian.....per lb. 1 00
powd.....per lb. 1 10
Capsicum, African, pods.....per lb. 20
Japanese, pods .....per lb. 24
powd.....per lb. 24
Caramel.....per lb. 16
Carbon Bisulphuret.per lb., cans incl. 20
in 5-lb. cans, per lb., cans incl. 25
Tetrachloride.....per lb. 22
Carmine, No. 40.....per oz. 25
Cassia Fistula.....per lb. 22
Castor Fiber.....per oz. 2 00
Catechu.....per lb. 14
powd.....per lb. 22
Cerate cantharides, ⅛-lb. rolls .per lb. 55
Cerium nitrate.....per oz. 24
oxalate, in 1-oz. cartons..per oz. 7
per lb. 27
Chalk, French, cut.....per lb. 15
powd.....per lb. 5
precip., English .....per lb. 10
prepared in drops.....per lb. 8
Red fingers .....per lb. 12
White, lump.....per lb. 3
in bbls.....per lb. ¾
Charcoal, animal.....per lb. 8
willow, in 1-lb. cartons.....per lb. 16
China Clay.....per lb. 3
Chinoidine.....per oz. rolls. 12
powd. purified.....per oz. 25
Chloralamid, in 25-gm. bots...per bot. 50
Chloral, Croton, Hydrate.....per oz. 25
Hydrate, cryst.....per lb. 1 15
crusts.....per lb. 1 10
Chlorotone.....per oz. 25
Chloroform.....per lb. 32
purified.....per lb. 43
Chlorophyl, for aqueous or alcoholic solutions.....per oz. 25
Chromium Chloride, cryst.....per oz. 24
Sulphate.....per oz. 12
Chrysarobin (see Acid Chrysophanic).
Cinaphenin.....per oz. 1 25
Cinchonidia Salicylate.....per oz. 20
Sulphate, 5-oz. tins.....per oz. 20
in 100-oz. tins.....per oz. 15
in 1-oz. vials.....per oz. 25
Citrine Ointment, in 1-lb. jars.per lb. 27
Citrophen.....per oz. 20
Civet.....per oz. 3 00
Cloves.....per lb. 27
powd.....per lb. 30
Cobalt, powd. (fly poison).....per lb. 25

Cobalt (*Cont'd*) **Carbonate**....per oz. $0 20
Chloride....per oz. 22
Nitrate....per oz. 22
Oxide....per oz. 20
Sulphate....per oz. 16
Cocaine Hydrochlorate, large crystals.
P. D. & Co.'s, in 1-oz. vials incl. per oz. 4 00
Cocaine Hydrochlorate, small crystals,
P. D. & Co.'s, in 1-oz. vials . per oz. 4 00
B. & S., in ⅛-oz. vials....per oz. 4 05
in 1-oz. vials....per oz. 3 85
Cocaine Muriate, cryst., bulk..per oz. 4 05
in 1-oz. vials....per oz. 4 10
in ⅛-oz. vials....per oz. 4 30
Phenate, 50% sol'n..in 30-gr. vials. 1 25
Cochineal, Honduras....per lb. 75
powd....per lb. 80
Cocoa, Baker's....per lb. 42
Breakfast....per lb. 48
Epps'....per lb. 45
Butter of, Baker's AA....per lb. 55
White....per lb. 55
Bensdorp's....per lb. 65
Butter of, Huyler's....per lb. 55
Codeine, pure, in ¼-oz. vials.. per oz. 7 30
Phosphate, in ⅛-oz. vials...per oz. 6 80
Muriate, in ¼-oz. vials....per oz. 7 30
Sulphate, in ¼-oz. vials....per oz. 7 05
Coffee, Acorn....per lb. 20
Colchicine, cryst., in 15-gr. vials..each 2 10
Colocynth Apples, select....per lb. 50
powd....per lb. 55
Collodion....per lb. 40
Cantharidal....per lb. 1 75
Flexible....per lb. 54
Columbian Spirits, bbl....per gal. 85
½-bbl....per gal. 90
per gal. 1 00
Copper, Arseniate....per oz. 19
Arsenite....per oz. 16
Acetate, cryst....per lb. 55
Carbonate....per lb. 22
Chloride....per lb. 55
Iodide....per lb. 43
Oxide, Black....per lb. 65
Sulphate (see Blue Vitriol).
purified, 1-lb. cartons....per lb. 22
Copperas....per lb. 3
in bbls....per lb. ¾
Cornu Cervi, calcined....per lb. 20
shavings....per lb. 25
Corrosive Sublimate, lump....per lb. 1 16
powd....per lb. 1 17
c. p....per lb. 1 60
Cotoin, true ⅛'s....per oz. 14 00
Coumarin....per oz. 22
Cream Tartar, crystals....per lb. 22-24
pure, powd....per lb. 22-24
Creolin Pearson, 1-lb.....per doz. 8 00
Creosote, Beechwood....per lb. 22
NOTE: Only the aromatic made from wood-tar should be sold as "creosote." The coal-tar product is poisonous; it should be known and sold for what it really is—"carbolic acid, liquefied;" and it will be found listed under this name among the "acids."
Creosote, carbonate(Schering).per oz. 65
Carbonate....per lb. 1 25
¼ lb....per lb. 2 00
¼ lb....per lb. 2 10
can....per oz. 20
Cresol, U. S. P.....per lb. 28
Crocus Martis....per lb. 12
Metallorum, powd....per lb. 22
Cudbear....per lb. 22
Daturine Alkaloid, cryst., 15-gr. vials,
each. 1 50
Sulphate, 15-gr. vials....each. 1 50
Dekota, Merck's....per lb. 62
Dermatol....per oz. 19
per lb. 2 50
Dextrin, white....per lb. 15
yellow....per lb. 10
Dextrose (Grape Sugar), c. p..per lb. 2 00
Diabetin....per lb. 1 60
Diamol, Photo Developer....per oz. 50
Diastase of Malt, Medicinal....per oz. 1 14
Digitalin, German, ⅛-oz.....per oz. 9 00
in 15-gr. vials....each. 45
Diogen (photo. developer)....per oz. 37
Dionin, 15-gr. vials....each. 35
Tablets, ¼-gr., 100 in vial..per bot. 65
¼-gr., 50 in vial....per bot. 35
Diuretin, Knoll's....per oz. 1 75
Dover's Powder, U. S. P.....per lb. 2 25
Dragon's Blood, powd....per lb. 1 00
select....per lb. 75
Duboisin Sulphate, 15-gr. vials..each. 1 50
Earth, Fuller's....per lb. 5
powd....per lb. 8
Elixonogen, 1-lb. tins, incl....per lb. 3 95
¼-lb. tins incl....per lb. 4 20
½-lb. tins incl....per lb. 4 50
in 1-oz. tins incl....per oz. 37
Elsterin, ⅛-oz. vials....per oz. 20 00
Elsterism....per oz. 79
Emery Flour....per lb. 8
Grain....per lb. 10
Emetin Resinoid, ¼-oz. bot....per oz. 5 25
Epicarin....per oz. 50

Ergot, German, powd....per lb. $1 75
Spanish....per lb. 1 70
powd....per lb. 1 75
Ergotin (Bonjean's)....per oz 79
per lb. 10 50
Eserine, c. p., in 5-gr. tubes....each. 1 00
Salicylate, in 5-gr. tubes....per gr. 16
Sulphate, in 5-gr. tubes....per gr. 16
Ether, Acetic....per lb. 25
Butyric....per lb. 1 05
Chloric, conc....per lb. 65
Nitrous, conc., 1-21....per lb. 75
1-10....per lb. 85
Rum....per lb. 3 00
Sulphuric, 1880, incl....per lb. 41
1890, incl....per lb. 32
washed....per lb. 37
for Anesthesia, 1-lb. incl....per lb. 32
¼-lb. incl....per lb. 41
¼-lb. incl....per lb. 51
Ethyl Bromide....per oz. incl. 20
Iodide....per oz. 49
Eucalyptol....per oz. 15
per lb. 85
Euphorin....per oz. 1 00
Europhen....per oz. 1 80
Exalgin....per oz. 1 40
Ext. Logwood, bulk....per lb. 11
Witch Hazel, distilled....per gal. 90
in bbls....per gal. 66
Ferratin, powd....per oz. 35
tablets....per box. 35
in 25-oz. lots....per oz. 30
Ferropyrine....per oz. 1 35
Flake White....per lb. 14
Flowers, Althea....per lb. 40
Arnica....per lb. 20
powd....per lb. 25
Borage....per lb. 50
Calendula....per lb. 1 25
Cassia....per lb. 1 75
Chamomile, German....per lb. 30
Roman....per lb. 45
Elder....per lb. 25
Insect (Pyrethrum)....per lb. 40
Kousso....per lb. 50
powd....per lb. 60
Lavender....per lb. 25
Malva Black....per lb. 35
no calyx....per lb. 40
Blue....per lb. 50
Melilot....per lb. 20
Mullein....per lb. 20
Orange....per lb. 1 00
Poppy, red....per lb. 50
Red Rose....per lb. 1 25
powd....per lb. 1 25
Rosemary....per lb. 25
Saffron, American....per lb. 65
Spanish....per lb. 18 50
Tilia, with leaves....per lb. 30
no leaves....per lb. 40
Fluor Spar....per lb. 10
Formalin....per lb. 40
Formaldehyde, 40%....per lb. 25
per gal. 1 40
carboys, per gal. 1 12
Formin....per lb. 1 00
Merck....per oz. 15
Frosting, white....per lb. 25
Fuller's Earth (see Earth, Fuller's).
Gadnol....per oz. 37
Gallanol....per oz. 1 25
Gallobromol....per oz. 1 25
Galls, Aleppo....per lb. 30
powd....per lb. 35
Gambier, or Terra Japonica....per lb. 15
Garantose (550 times sweeter than
best sugar)....per lb. 2 00
per oz. 19
Garlic, in strings....per string. 25
Gelanthum, in 1-lb. jars....per lb. 75
Gelatin, Cox's, 2-oz.....per doz. 1 75
1-oz....per doz. 1 25
Cooper's, 2-oz....per doz. 75
sheet....per lb. 80
French, pink....per lb. 1 00
white, extra....per lb. 90
No. 1....per lb. 80
No. 2....per lb. 35
German, gold label....per lb. 50
silver label....per lb. 35
copper label....per lb. 20
Nelson's, 2-oz....per doz. 1 65
amber....per lb. 1 15
photo. No. 1....per lb. 1 40
No. 2....per lb. 1 20
Gelsemin (resinoid)....per oz. 2 50
Gelsemine Alkaloid, 15-gr. vials..ea. 2 50
Hydrochlor., amorph., 15-gr. vials,
each. 2 50
Sulphate, amorph., 15-gr. vials..ea. 2 50
Glass Wool....per oz. 75
Gold Mono-Bromide, in 15-gr. vials..ea. 1 25
Chloride, in 15-gr. vials....per doz. 5 25
in 30-gr. vials....per doz. 10 50
in ⅛-oz. vials....per oz. 12 25
and Sodium Brom. in 15-gr. vials,
each. 70

Gold (*Cont'd*) **and Sodium Chlor., in**
15-gr. vials....per doz. $2 75
in 30-gr. vials....per doz. 5 25
in ¼-oz. vials....per oz. 6 25
Cyanide, trl, in 15-gr. vials..each. 2 00
Oxide, in 15-gr. vials....each. 1 25
Glycerin, Price's, in 1-lb. bots..per lb. 60
in 5-lb. bottles....per lb. 55
Schering's, in 1-lb. bottles..per lb. 80
in 10-lb. bottles....per lb. 40
30°....per lb. 20
30° in 30-lb. cans....per lb. 22
Vienna, c. p., in 1-lb. bots..per lb. 65
in 5-lb. bots..per lb. 55
Bowers', in 1-lb. bottles....per lb. 60
Glycine, in oz. vials....per oz. 55
Glycyrrhizin, ammoniated....per oz. 22
Grains Ambrette....per lb. 60
Paradise....per lb. 40
powd....per lb. 45
Green, Paris, arsenic, kegs....per lb. 15½
100 kegs....per lb. 16
14 and 28-lb. pkgs....per lb. 18
1-lb. pkgs....per lb. 20
¼-lb. pkgs....per lb. 21
½-lb. pkgs....per lb. 23
Guaiacol, absolute....per oz. incl. 22
per lb. 2 40
Carbonate....per oz. incl. 25
per lb. 2 27
Salicylate....per oz. 1 60
Guaiamar....per oz. 1 25
Guarana (Paullinia)....per lb. 2 50
powd....per lb. 2 75
Gum Aloes, Barbadoes, gourds..per lb. 1 50
powd....per lb. 1 60
Cape....per lb. 25
powd....per lb. 25
Curacao....per lb. 22
powd....per lb. 25
Soc.....per lb. 25
powd....per lb. 40
Amber, tears....per lb. 60
Ammoniac, tears....per lb. 20
powd....per lb. 75
Arabic, 1st....per lb. 45
powd....per lb. 40
2d....per lb. 25
sorts....per lb. 18
Asafetida, powd., U. S. P...per lb. 1 25
select....per lb. 1 00
Benzoin, marbled....per lb. 50
Siam....pdr lb 1 75
Catechu....per lb. 14
Chicle....per lb. 75
Damar....per lb. 20
Elemi....per lb. 50
Galbanum, pure, strained..per lb. 1 25
Gamboge, powd....per lb. 1 10
pipe, select....per lb. 1 00
Gualac, select, U. S. P.....per lb. 60
powd....per lb. 65
Kino, true....per lb. 40
powd....per lb. 45
Mastic....per lb. 35
Myrrh, select....per lb. 40
powd....per lb. 35
Opium....per lb. 8 25
granular....per lb. 9 25
powd....per lb 9 50
Senegal....per lb. 35
sifted....per lb. 38
Sandarac....per lb. 35
Shellac, bleached....per lb. 35
native....per lb. 30
English....per lb. 25
D. C....per lb. 40
Garnet....per lb. 35
powd....per lb. 40
Spruce, true....per lb. 1 50
extra....per lb. 2 00
Storax, liquid....per lb. 35
Thus....per lb. 10
Tragacanth, flake, 1st....per lb. 1 10
2d....per lb. 85
powd....per lb. 60 to 1 10
ribbon, No. 1....per lb. 1 25
Gutta Percha, crude shavings..per lb. 1 75
sheet....per lb. 1 75
Hedonal....per oz. 1 60
Helenin, cryst., white, in 15-gr. vials,
each. 50
Heliotropin, in 1-oz. vials....per oz. 60
Helmitol....per oz. 60
Tablets, 25's....per box. 25
Hematoxylin, in ⅛-oz. vials....per oz. 2 00
Hemo-gallol....per oz. 30
Tablets, 4 gr., 100 in bot..each. 30
Hemol....per oz. 30
Heroin, in 15-gr. vials....each. 37
in ¼-oz. vials....per oz. 7 70
in ½-oz. vials....per oz. 7 45
in 1-oz. vials....per oz. 7 40
Hydrochlor., in 15-gr. vials..each. 32
in ¼-oz. vials....per oz. 9 10
in ½-oz. vials....per oz. 8 90
in 1-oz. vials....per oz. 8 80

Hexamethylenetetramine (Formin), per oz. $0 14
in ¼-lbs. per lb. 1 20
in ½-lbs. per lb. 1 14
in 1-lbs. per lb. 1 09
Hiera Picra (pulv. aloes and canella) per lb. 35
Homatropine Alkaloid, in 5-gr., 10-gr. and 15-gr. vials per gr. 22
Hydrobrom., in 5-gr., 10.gr. and 15-gr. vials per gr. 20
Hydrochlor., in 5-gr., 10-gr. and 15-gr. vials per gr. 22
Salicylate, in 5-gr., 10-gr. and 15-gr. vials per gr. 22
Sulphate, in 5-gr., 10-gr. and 15-gr. vials per gr. 12
Hoffmann's Anodyne per lb. 51
U. S. P. per lb. 1 00
Holocaine, in 1-gramme vials each. 35
Honey, strained per lb. 18
Hops, new per lb. 65
1911, bulk per lb. 60
pressed, in ¼-lbs., ⅛-lbs. and 1-lbs. per lb. 60
oss per lb. 65
1907, old, in ¼-lbs, ⅛-lbs., 1-lbs. per lb. 45
Hydragogin 15-gm. vials each. 90
Hydrastine, Alkaloid, c. p., 15-gr. vials, each. 1 15
in ¼-oz. vials per oz. 80 24
Muriate 15-gr. vials, each. 1 15
in ½-oz. vials per oz. 80 24
Sulphate 15-gr. vials, each. 1 15
in ½-oz. vials per oz. 80 24
Hydrochinon, lbs., ⅛ and ¼ lbs., per lb. 77 to 83
oss per oz. 13
Hydrogen Peroxide (P. D. & Co.)
in gallon bots. per lb. 18
in 5-lb. bots. per lb. 22
in 1-lb. bots. per lb. 30
in ½-lb. bots. per lb. 35
in ¼-lb. bots. per lb. 45
U. S. P. carboy per lb. 9
technical carboy. per lb. 7
Hyoscine, Amorph., in 15-gr. vials, each. 5 50
Hydrobromate, in 3-gr., 5-gr. 10-gr. and 15-gr. vials per gr. 9
Hydrobromate, 1 gr. vls. per gr. 18
Hydrochlorate, in 3-gr., 5-gr., 10-gr. and 15-gr. vials per gr. 9 to 18
Hydriodate, in 3-gr., 5-gr., 10-gr. 15-gr. vials per gr. 9 to 18
Sulphate, in 3-gr., 5-gr., 10-gr. and 15-gr. vials per gr. 9 to 18
Hyoscyamine, alkaloid, cryst., in 5-gr., 10-gr. and 15-gr. vials per gr. 21
alkaloid, amorph., in 5-gr., 10-gr., and 15-gr. vials per gr. 21
Hydrobromate, in 5-gr., 10-gr. and 15 gr. vials per gr. 21
Hydrochlorate, in 5-gr., 10-gr. and 15-gr. vials per gr. 21
Sulphate, amorph., in 5-gr., 10-gr. and 15-gr. vials per gr. 17
Sulphate, cryst., in 5-gr., 10-gr. and 15-gr. vials per gr., 33 to 49
Hypnone, medicinal, 1-oz. g. s. vials, per oz. 1 15
Iatrol per oz. 95
Ichthalbin per oz. 80
Tablets, 5 grs. per oz. 1 00
Ichthynat, in lbs. per lb. 2 00
in ½ lbs. per lb. 2 10
in ¼ lbs. per lb. 2 25
in oss per lb. 20
Ichthyol, Ammonium. lb., ½-lb., and ¼-lb. per lb., $4 00-4 25
oss per oz. 22
Sodium, oss. per oz. 40
Imogen (Photo developer) per oz. bot. 37
Indigo, Manila per lb. 1 00
Madras per lb. 1 05
powd per lb. 1 10
Bengal per lb. 1 60
powd per lb. 1 70
Iodantipyrin (Iodopyrin) per oz. 1 40
Iodine, crude per lb. 3 50
Resublimed per lb. 3 75
per oz. 39
Bromide per oz. 45
solution, 15% per oz. 40
Chloride Solution per oz. 50
Iodipin, 10% per oz. 28
25% per oz. 65
Iodoform, cryst. or powd per lb. 4 80
per oz. 41
in fine powd. (P. D. & Co.) per lb. 5 40
per oz. 35
Deodorized per oz. 59
Bituminized per oz. 79
Iodogermin per oz. 1 00
Iodogermogen per oz. 50
Iodol per oz. 1 25
Iodosmuth per oz. 75
Iridin, pure per oz. 2 54

Iron, Acetate, dry per oz. $0 19
liquor, U. S. P. per lb. 35
tincture per lb. 50
Albuminate, scales per oz. 30
Alcoholized per lb. 32
Ammoniated per lb. 35
Arsenate (or arseniate) per oz. 16
Arsenite per oz. 17
Benzoate per oz. 22
Bromide per oz. 16
by hydrogen, 60-70% per lb. 45
gray, 80-85% per lb. 48
U. S. P. per lb. 55
Carb., precip per lb. 12
Carbonate, Proto per lb. 30
sacch. per lb. 30
Chloride, crys. (ferric chlor.) per lb. 25
solution for tincture per pt. 15
tincture per lb. 28
Proto. (Ferrous Chlo.) per oz. 16
Citrate, soluble, lbs. per lb. 50
oss. per lb. 12
U. S. P. per lb. 62
per oz. 12
and Ammonia per lb. 50
green, scales per lb. 74
and Quinine per oz. 22
per lb. 1 80
and Strychnine per lb. 1 15
oss. per oz. 16
Quinine and Strychnine per oz. 24
Dialysed per lb. 60
Filings per lb. 10
Ferrocyanide, medicinal, lbs. per lb. 47
oss. per oz. 10
Glycerinophosphate per oz. 26
Hydr. Oxide (Ferric Hydr.) per lb. 25
Hypophosphite per oz. 10
per lb. 1 60
Iodide per oz. 37
syrup per lb. 30
Lactate per oz. 9
Lactophosphate per oz. 18
Nitrate for dyeing per lb. 12
Solution, U. S. P. per lb. 25
Oxalate, Ferrous per oz. 14
Ferric per oz. 16
and Ammonium oxalate, Ferric, per oz. 14
Peptonized per lb. 2 25
per oz. 24
Potassium oxalate, Ferric. per oz. 14
Sodium oxalate, Ferric. per oz. 14
Oxide, black per lb. 45
Phosphate precip. per lb. 37
U. S. P., scales per lb. 50
per oz. 12
Pyrophosphate per lb. 50
per lb. 12
Salicylate per oz. 15
Subsulphate per lb. 37
per oz. 7
Solution per lb. 15
Succinate per oz. 49
Sulphate, dried, pure per lb. 18
com'l per lb. 8
pure, cryst. per lb. 12
granulated per lb. 12
granulated, c. p. per lb. 40
Sulphide, Ferrous per lb. 18
Sulphocarbolate per oz. 13
Tannate per oz. 28
Tartrate per oz. 19
and Ammonium per lb. 62
per oz. 11
Potassium per lb. 65
per oz. 11
Tersulphate, sol., U. S. P. per lb. 20
dried per lb. 40
Turnings (wrought iron) per lb. 10
Valerianate per oz. 22
and Ammonia Protosulph. per lb. 14
and Manganese, Peptonised. per lb. 2 00
per oz. 24
Isinglass, American per lb. 1 60
Brazil shred per lb. 2 90
Russian, true Beluga per lb. 5 00
Japanese per lb. 70
Juice, Cineraria Maritima, ¼-oz. bots., per doz. 2 00
Conium per lb. 1 50
Dandelion per lb. 1 25
Elder per lb. 60
Juniper per lb. 60
Licorice per lb. 60
Lime per gal. 90
clarified per gal. 1 25
Pawpaw, dry per oz. 44
Kamala, powd per lb. 1 25
Kaolin per lb. 7
Kefir Fungi per oz. 1 00
Keratin, from horn per oz. 75
peptonized, in ½-oz. per oz. 3 75
Kermes mineral per lb. 90
Kola Nuts, Afr per lb. 30
Koussein Amorph., in ½-oz. per oz. 6 50
Kryofine per oz. 1 00
Lac Dye, powd per lb. 30
Lacmoid scales, in ½-oz. vials. per oz. 1 75

Lactophenin, powd per oz. $1 00
tablets per oz. 1 00
in 25-oz. lots per oz. 30
Lactucarium per lb. 6 50
in oss. per oz. 54
Lanolin, in ¼-lb., ½-lb. & 1-lb. per lb. 75
Lanum (see Adeps Lanæ)
Lapis Calaminaris per lb. 10
Lard, Benzoated, in 5-lb. cans. per lb. 28
Dehydrated, in 5-lb. cans. per lb. 20
Largin per oz. 1 75
Lead, Acetate, granular, pure. per lb. 20
powd., pure. per lb. 22
white per lb. 16
Arseniate per lb. 14
paste form, for insecticide purposes:
100-lb. kegs. per lb. 7
50-lb. kegs. per lb. 7½
25-lb. kegs. per lb. 8
10-lb. buckets. per lb. 9
5-lb. cans. per lb. 10
1-lb. cans. per lb. 12
1-lb. glass jars. per lb. 14½
Benzoate per lb. 30
Bromide per lb. 24
Carbonate per lb. 12
pure per lb. 60
Chloride, pure, 1-oz. per oz. 12
Chromate per lb. 65
Iodide, powd. per oz. 31
Metallic, pure, gran. (test) per lb. 40
Nitrate per lb. 22
c. p. per lb. 40
Oxide, com'l per lb. 12
medicinal per lb. 45
Subacetate, sol per lb. incl. 20
Sulphate, medicinal per lb. 60
Tannate, dry per oz. 24
Leaves, Aconite, Eng., in 1-lb. cans, per lb. 1 10
German per lb. 15
powd. per lb. 25
pressed, oss. per lb. 25
Angelica, pressed, oss. per lb. 25
Adder's Tongue, oss. per lb. 40
Arbor Vitæ per lb. 24
Bay, oss per lb. 30
Belladonna, Eng., 1-lb. tins. per lb. 1 20
German per lb. 25
powd per lb. 40
pressed, oss. per lb. 45
Benne, pressed, oss. per lb. 20
Blessed Thistle, pressed, oss. per lb. 24
Borage, pressed, oss. per lb. 25
Buchu, long per lb. 1 75
short per lb. 2 00
powd per lb. 2 00
Buckbean, pressed, oss. per lb. 20
Cannabis Indica per lb. 2 00
Castor per lb. 20
Coca per lb. 20
Conium, Eng., 1-lb. tins. per lb. 1 00
German per lb. 20
powd. per lb. 25
pressed, oss. per lb. 20
Coltsfoot per lb. 20
pressed, oss. per lb. 25
Damiana per lb. 20
Digitalis, Eng., 1-lb. tins. per lb. 25
German per lb. 25
powd per lb. 40
pressed, oss. per lb. 40
Eucalyptus per lb. 18
Grindelia Robusta per lb. 25
Squarrosa per lb. 40
Hardback, pressed, oss. per lb. 20
Hemlock, pressed, oss. per lb. 20
Henbane, Eng., 1-lb. tins. per lb. 1 00
German per lb. 20
powd. per lb. 25
pressed, oss. per lb. 20
Henna per lb. 25
powd per lb. 30
Jaborandi per lb. 24
powd. per lb. 40
Liverwort, pressed, oss. per lb. 27
Lovage, pressed, oss. per lb. 42
Lungwort, pressed, oss. per lb. 24
Marjoram, sweet per lb. 25
Matico per lb. 25
powd. per lb. 45
Mistletoe, pressed, oss. per lb. 20
Mugwort, pressed, oss. per lb. 25
Mullein, pressed, oss. per lb. 19
Parsley, pressed, oss. per lb. 40
Plantain, pressed, oss. per lb. 20
Poppy, pressed, oss. per lb. 25
Raspberry, pressed, oss. per lb. 25
Rose, pale per lb. 20
red per lb. 1 25
Rosemary, bulk per lb. 25
pressed, oss. per lb. 25
Sage, American, leaf per lb. 20
Italian per lb. 10
ground per lb. 15
loose pressed, ¼'s per lb. 15
pressed, ¼'s per lb. 12
oss per lb. 15

Leaves (*Cont'd*) Savin, bulk ...per lb. $0 28
powd.....per lb. 30
pressed, ozs.....per lb. 35
Senna, Alexandria.....per lb. 20
garbled.....per lb. 40
powd.....per lb. 25
Tinnevelly, select.....per lb. 18
Stramonium.....per lb. 20
powd.....per lb. 25
pressed, ozs.....per lb. 24
Strawberry, pressed, ozs ...per lb. 25
Sumac, pressed, ozs .....per lb. 30
Thyme, pressed, ozs.....per lb. 24
Uva Ursi.....per lb. 12
powd.....per lb. 20
Witch-hazel, pressed, ozs...per lb. 22
Leeches, Swedish.....per doz. 72
Lemon Peel.....per lb. 15
ground.....per lb. 17
Licorice Calabria, Corigliano, 4's, 6's, 8's, and 16's .....per lb. 30-34
Corigliano, mass....per lb. 27-30
P. & S., 16's.....per lb. 26-30
Solazzi, 4's .....per lb. 26-28
powd .....per lb. 30
M. & R., stick, 5-lb. boxes ..per lb. 35
lozenges, 5-lb. boxes.....per lb. 35
Cataluna, 100 sticks in box.
per box. 50
wafers, in bags, 48 in box .p. box. 1 35
Scudder's, 8's and 16's, 5-lb. boxes,
per lb. 35
lozenges, 5-lb. tins.....per lb. 35
5c. pkgs.....per box. 65
Eureka Pellets, 5-lb. tins..per lb. 35
Y. & S., stick, 5-lb. boxes..per lb. 35
Acme Pellets. 5-lb. cans .per lb. 30
5c. bags, 40 in bx.per box. 1 10
lozenges, 5-lb. cans.....per lb. 35
wafers.....per lb. 30
Lime and Sulphur solution for spraying fruit trees:
Bbls. of 50 gals.....per bbl. 7 00
½-bbls. of 30 gals.....each. 4 75
5-gal. cans.....per gal. 25
Bisulphate solution.....per gal. 30
Carbolate .....per doz. 1 30
No. 1.....per lb. 25
No. 2.....per lb. 9
Chloride, bulk .....per lb. 3½-4
jars.....per lb. 5
in 1-lb. cans.....per lb. 8
Glycerophosphate.....per oz. 30
Iodide, Nichols.....per oz. 42
Lithium Acetate.....per oz. 30
Benzoate.....per lb. 1 45
per oz. 19
Benzo-salicylate.....per oz. 30
Bitartrate.....per oz. 21
Bromide.... .....per lb. incl. 2 00
per oz. 24
Carbonate.....per lb. incl. 1 10
ozs .....per oz. 16
Chloride .....per lb. incl. 2 00
ozs .....per oz. 23
Citrate .....per lb. incl. 1 55
ozs.....per oz. 19
Glycerinophosphate.....per oz. 74
Iodide.....per oz. 50
Nitrate.....per oz. 21
Salicylate.....per lb. incl. 1 35
ozs.....per oz. 18
Sulphate .....per oz. 21
Tartrate.....per oz. 26
Litmus Cubes .....per lb. 30
paper (see Paper).
Lunar Caustic, ozs.....per oz. 52
No. 2, 67% Nitrate silver,
per oz. 42
No. 3, 50% Nitrate silver,
per oz. 34
Mitigated, 33% Nitr. silver,
per oz. 29
in cones per oz. 62
Lodestone.....per lb. 35
Lotion, Granville's .....per lb. 38
Lupulin .....per lb. 3 00
Lycopodium, Russian .....per lb. 70
Lysol.....per lb. 67
in gal. jugs.....per gal. 4 00
Mace.....per lb. 60
powd .....per lb. 65
Madder, Dutch.....per lb. 12
Magnesium, Metallic powd.,lbs.per lb. 2 60
ozs.....per oz. 35
ribbon, oz. roll per oz. 45
Acetate.....per oz. 24
Benzoate .....per oz. 24
Boro-Citrate, lbs.....per lb. 1 25
ozs.....per oz. 18
Bromide.....per oz. 27
Calcined .....per lb. 50
Carbonate, 1-oz. pkgs .....per lb. 20
powd .....per lb. 15
2-oz. pkgs .....per lb. 18
4-oz. pkgs .....per lb. 16
Chloride, fused .....per lb. 20
crystals.....per lb. 25
Citrate .....per oz. 16
Glycerinophosphate.....per oz. 28

Magnesium (*Cont'd*) Hypophosphate,
per oz. $0 20
Iodide .....per oz. 49
Lactate.....per oz. 24
Lactophosphate.....per oz. 24
Peroxide.....per lb. 2 50
per oz. 28
Phosphate.....per lb. 45
per oz. 10
Salicylate.....per lb. 19
Silicate.....per oz. 19
Sulphate, dried.....per lb. 15
c. p .....per lb. 18
Sulphite .....per lb. 40
per oz. 8
Manganese, Black Oxide .....per lb. 10
Borate..... per lb. 42
Bromide .....per oz. 30
Carbonate.....per oz. 14
Chloride.....per oz. 14
Citrate.....per oz. 19
Glycerinophosphate.....per oz. 28
Hypophosph.. .....per oz. 20
Iodide .....per oz. 49
Lactate..... per oz. 20
Peptonized.....per oz. 20
Phosphate.....per oz. 18
Sulphate .....per oz. 10
pure cryst..... per lb. 50
dried. .....per lb. 50
Manna, large flake..... per lb. 1 25
small flake.....per lb. 1 00
Mannit .....per lb. 2 25
Marble Dust .....per bbl. 2 25
Meconin, in ½-oz. vials .....per oz. 20 00
Menthol, Jap.....per lb. 16 50
per oz. 1 20
Mercurol, ¼-oz. vials .....per oz. 1 60
½-oz. vials.....per oz. 1 55
1-oz. vials.....per oz. 1 50
Mercury, Acetate.....per oz. 30
Ammoniated..... per lb. 1 67
Bichloride .....per lb. 1 16
Bisulphate.....per lb. 88
Bromide.....per oz. 33
Cyanide .....per oz. 28
Iodide, red.....per oz. 20
Metallic. .....per lb. 85
distilled.....per lb. 90
Nitrate (Mercurous cryst)per oz. 27
(Mercuric, cryst.).... per oz. 27
(Mercuric, solution)..per oz. 17
Oxide, yellow.....per oz. 16
black .....per oz. 18
(Hahnemann's soluble mercury)
Oxide, red .....per lb. 1 42
Oxycyanide .....per oz. 26
Protiodide.....per oz. 27
Salicylate.....per oz. 27
Subsulphate.....per oz. 15
Succinate .....per oz. 40
Succinimide .....per oz. 1 04
Sulphuret (Ethiop's Mineral)
(Black Sulphide Mercury).per lb. 70
with chalk .....per lb. 66
Mercurial Ointment, ½.....per lb. 66
½.....per lb. 56
Metacarbol (photo developer).per oz. 45
Methylene Blue, Medicinal....per oz. 24
Metol.....per oz. 55
per lb. 7 00
Milk, Sugar, cryst .....per lb. 40
powd.....per lb. 28
in 50-lb. lots.....per lb. 26
Morphia Acetate, P.-W.-R. Co.,
⅛'s, per oz. 5 60
Diacetyl, pure .....per oz. 6 45
Hydrochloride.....per oz. 6 20
Ethyl hydrochloride.....per oz. 7 90
Muriate, N. Y. Q., ⅛'s....per oz. 4 80
P.-W.-R. Co., ⅛'s...per oz. 4 80
Sulphate, N. Y. Q., ⅛'s ..per oz. 4 80
1-16's.per oz. 5 15
1-32's.per oz. 5 60
ozs...per oz. 4 55
P.-W.-R. Co., ⅛'s..per oz. 4 80
ozs..per oz. 4 55
Mallinckrodt, ⅛'s...per oz. 4 80
ozs..per oz. 4 55
Moss, Iceland .....per lb. 12
Irish, bleached.....per lb. 16
Musk, Chinese .....per oz. 35
Tonquin, grain extra.....per dr. 4 00
Mustard, yellow, Eng., powd..per lb. 20
Naphthalin, balls, in bbl. lots. per lb. 3½
in flakes in bbl. lots.....per lb. 3½
pure .....per oz. 25
sticks, in bbl. lots.....per lb. 3½
Naphthol, Beta.....per oz. 10
Benzoate.....per oz. 14
Nickel, Acetate.....per oz. 24
Bromide.....per oz. 25
Carbonate .....per lb. 1 25
Chloride.....per oz. 13
Metallic.....per lb. 1 10
Nitrate .....per oz. 17
Oxalate..... per oz. 22
Oxide, blk., c. p .....per oz. 24
Sulphate .....per oz. 10
per lb. 26
and Ammonium sulphate...per lb. 21

Nuxvesperis .....per oz. $0
Tablets.....per 25.
per 100.
Nutmegs.....per lb.
powd.....per lb.
Nux Vomica, powd.....per lb.
rasped.....per lb.
Oakum, surgeon's.....per lb.
Oil Meal, in 100-lb. sacks..per 100 lbs. 2
Oil Almonds, bitter .....per oz.
sweet, true.....per lb.
Amber, crude.....per lb.
rect.....per lb.
Animal, Dippel's.....per lb.
Anise.....per lb. 2
Bay .....per lb. 4
Bergamot .....per lb. 8
Birch, Sweet.....per lb. 2
Cade.....per lb.
Cajuput, Redistilled, U.S.P. per lb. 1
Camphor.....per lb.
Capsicum.....per oz.
Caraway Seed.....per lb. 2
Cassia.....per lb. 1
Castor.....per gal. 1
XXX in 5-gal. cans incl..per gal. 1
Machine.....per gal.
Cedar, pure .....per lb.
Chaulmoogra.....per lb. 2
Cherry Laurel.....per lb.
Cinnamon Bark, Ceylon....per oz.
Citronella.....per lb.
Cloves.....per lb. 1
Cocoanut.....per lb.
Cod-liver, Norwegian.....per gal. 1
per bbl. 27
Copaiba, pure.....per lb. 1
Coriander.....per oz.
Cottonseed.....per gal.
Croton.....per lb. 1
Cubeb.....per lb. 4
Ergot .....per oz.
Erigeron.....per lb. 2
Eucalyptus.....per lb.
Fennel.....per lb. 2
Fusel, com'l.....per gal. 4
rectified.....per lb.
Goose.....per lb.
Hemlock, pure.....per lb.
Juniper Berries .....per lb. 1
Wood.....per lb.
Lard, extra.....per gal.
in bbls.....per gal.
No. 1.....per gal.
in bbls .....per gal.
No. 2.....per gal.
in bbls.....per gal.
Lavender Flowers.....per lb. 4
Garden .....per lb. 1
Spike .....per lb. 2
Lemon.....per lb. 2
Lemongrass.....per lb 2
Linseed, boiled.....per gal.
in bbls.....per gal.
Raw .....per gal.
in bbls.....per gal.
Male Fern, ethereal.....per oz.
Mustard, Artificial .....per oz.
Essential .....per oz.
Neatsfoot .....per gal. 1
Neroli, Bigarade, best.....per oz. 4
Nutmeg.....per oz.
Orange, Bitter .....per lb. 3
Sweet.....per lb. 3
Olive, Malaga.....per gal. 1
in bbls.....per gal. 1
Salad, finest..per gal. 2 85 to 3
Origanum, imitation.....per lb.
pure .....per lb. 1
Palm .....per lb.
Peach Kernels.....per oz.
Pennyroyal, American .....per lb. 2
Peppermint, Wayne County.per lb. 4
Western .....per lb. 3
Petrolina, Water White .....per lb.
per gal. 1
Pimento..... per lb. 2
Pinus Pumilio.....per oz.
Pinus Sylvestris, German ...per lb.
Poppy.....per lb.
Rhodium, true.....per oz.
Rose Geranium .....per oz.
Kissanlik.....per oz. 16
Rosemary Flowers.....per lb. 1
Rue.....per oz.
Sandalwood, English.....per lb. 4
German.....per lb. 2
Sassafras, Natural.... .....per lb.
Synthetic, U. S. P ....per lb.
Savin.....per lb. 2
Sesame.....per gal. 1
Skunk.....per lb.
Spearmint .....per lb. 5
Sperm .....per gal. 1
Tansy.....per lb. 3
Tanner's.....per gal.
Tar, U. S. P.....per gal.
Thyme, red.....per lb. 1
white.....per lb. 1
Whale.....per gal.

Oil (*Cont'd*) Wine, heavy.....per lb. $5 00
light.....per lb. 3 75
Wintergreen, from Sweet Birch, per lb. 2 25
from Wintergreen.....per lb. 5 00
synthetic.....per lb. 60
Wormseed, Baltimore.....per lb. 6 50
Wormwood, No. 1.....per lb. 7 50
No. 2.....per lb. 5 00
Orange Apples.....per lb. 12
Peel, Curacoa discs.....per lb 15
ground.....per lb. 15
ribbon.....per lb. 22
Sicily.....per lb. 14
Peel, Sicily, ground.....per lb. 15
Ortol.....per oz. 55
Pancreatin, pure.....per oz. incl. 50
Papain, in 1-oz. vials.....per oz. 50
Pape's Cold Compound.....per doz. 2 00
Papoid.....per oz. incl. 2 00
Paraffine Wax.....per lb. 12 to 14
Paraldehyde.....per lb. 80
Paris Green (see Green).
Pelletierine Tannate, in 15-gr. vials, per vial. 25
Pepper, Black.....per lb. 18
powd.....per lb. 20
White.....per lb. 25
powd.....per lb. 30
Phenacetine.....per oz. 33
Phenol-Pthalein.....per oz. 19
per lb. 1 85
Phenocol Hydrochlorate, 25 grm. incl. 1 50
Pilocarpine Muriate, in 5, 10, and 15-gr. vials.....per gr. 2
Nitrate, in 5, 10, and 15-gr. vials, per gr. 2
Piperazine.....10-grm. vials. 1 50
in ½-oz. and 1-oz. vials...per oz. 4 25
Piperine.....per oz. 50
Pitch, black.....per lb. 6
Burgundy.....per lb. 10
Plaster, Lead.....per lb. 40
Mercury, U. S. P.....per lb. 1 00
Plaster-of-Paris, dental.....per bbl 2 00
Platinum Chlor.....per oz. 20 00
and Potass. chlor., in 15-gr. vials, per doz. 14 50
Plumbago.....per lb. 8
Podophyllin.....per oz. 35
Pollantin Powder.....per pkg. 1 75
Liquid.....per pkg. 1 75
Ointment.....per pkg. 55
Poppy Heads.....per lb. 40
Potassium Acetate.....per lb. 40
Bicarbonate.....per lb. 15
Bichromate.....per lb. 17
Bitartrate, in 50-lb. lots...per lb. 26
Bromide.....per lb. 49
P.-W.-R. Co.....per lb. 49
Carbonate.....per lb. 14
Caustic, pure, by alcohol.per lb. 45
White, sticks.....per lb. 25
Chlorate, cryst.....per lb. 16
gran.....per lb. 22
powd.....per lb. 16
Citrate.....per lb. 55
Cyanide, c. p.....per lb. 49
fused.....per lb. 39
Glycerinophosphate.....per oz. 20
Hypophosphite.....per lb. 90
Iodide.....per lb. 2 85
P.-W.-R. Co.....per lb. 2 65
Nitrate, cryst.....per lb. 12
in kegs.....per lb. 7½
powd.....per lb. 12
Oxalate, Neutral.....per lb. 35
Permanganate, cryst. per lb. incl. 22
Prussiate, red.....per lb. 50
yellow.....per lb. 35
Salicylate.....per oz. 15
Sulphide.....per lb. incl. 21
Sulphate.....per lb. 18
Tartrate.....per lb. 53
Powder, Insect, in kegs.....per lb. 20
50 lbs.....per lb. 20
25 lbs.....per lb. 21
in 10-lb. tins.....per lb. 24
Propylamine, pure liquid.....per oz. 55
Muriate.....per oz. 2 50
Pyoktanin.....per oz. 1 50
Pyrol, photo. developer.....per oz. 25
Quinidine Sulph.....per oz. 60
Quinine, Bisulphate.....per oz. 32
Glycerinophosphate.....per oz. 1 10
Hydrobromate.....per oz. 57
Hypophosphite.....per oz. 68
Muriate.....per oz. 55
Phosphate.....per oz. 59
Pure Alkaloid.....per oz. 61
Salicylate.....per oz. 57
Sulphate, bulk, 100-oz. lots, p. oz. 23½
1-oz. cans.....per oz. 31
N. Y. Q.....os vials. 33
os. cans. 31
P.-W.-R. Co.....os bots. 33
in 5-oz. tins.....per oz. 26½
B. & S.....os. bots. 33
in os. cans. 31

Quinine (*Cont'd*) Sulphate, German, per oz. vial. $0 28
in 5-oz. cans.....per oz. 22
Java, 100-oz. cans.....per oz. 17
P.-W.-R. Co.....per oz. 23
in 5-oz. cans.....per oz. 23
Tannate.....per oz. 39
Valerianate, in 1-oz. vials.per oz. 60
Red Precipitate.....per lb. 1 41
Resin, E.....per bbl. 280 lbs. gross. 6 00
G.....per bbl. 280 lbs. gross. 8 10
WG.....per bbl. 280 lbs. gross. 10 50
Resorcin, recryst.....per oz. 15
per lb. 1 10
resublimed.....per oz. 66
Rheumatin.....per oz. 1 15
Rhodol (Photo-developer).....per oz. 45
Root, Aconite.....per lb. 25
Alkanet.....per lb. 18
Angelica.....per lb. 35
Arnica.....per lb. 30
Ava (Kava-Kava).....per lb. 1 50
Belladonna.....per lb. 40
Berberis Aquifol.....per lb. 50
Blackberry.....per lb. 30
Blood.....per lb. 90
Blue Flag.....per lb. 35
Burdock.....per lb. 18
Calamus, White, peeled....per lb. 45
powd.....per lb. 30
Canada Snake.....per lb. 25
Cohosh, Black.....per lb. 12
Blue.....per lb. 18
Colchicum.....per lb. 30
Columbo.....per lb. 20
powd.....per lb. 25
Comfrey.....per lb. 22
powd.....per lb. 30
Culvers.....per lb. 25
powd.....per lb. 30
Dandelion, American.....per lb. 17
German.....per lb. 30
Elecampane.....per lb. 20
powd.....per lb. 25
Galangal.....per lb. 15
powd.....per lb. 20
Gelseminum.....per lb. 40
Gentian.....per lb. 12
ground.....per lb. 18
powd.....per lb. 14
Ginger, African.....per lb. 16
ground.....per lb. 18
50 lbs.....per lb. 16
Jamaica.....per lb. 28
ground.....per lb. 30
Ginseng.....per lb. 8 50
Golden-seal.....per lb. 6 00
powd.....per lb. 6 00
Hellebore, Black.....per lb. 25
White, powd.....per lb. 20
Indian Hemp, Black.....per lb. 50
Turnip.....per lb. 26
powd.....per lb. 35
Ipecac, Cartagena.....per lb. 2 75
powd.....per lb. 2 75
Rio.....per lb. 2 75
powd.....per lb. 2 75
Jalap, powd.....per lb. 50
Lady's-slipper.....per lb. 70
Licorice, Russian, bdls.....per lb. 18
cut, peeled....per lb. 25
powd.....per lb. 22
Spanish, powd.....per lb. 12-14
Lovage, select.....per lb. 25
Male-fern.....per lb. 25
powd.....per lb. 30
Mandrake.....per lb. 20
powd.....per lb. 22
in 50-lb. lots.....per lb. 19
Marshmallow, cut.....per lb. 60
powd.....per lb. 55
Musk.....per lb. 30
Orris, fingers, select.....per lb. 1 00
Florentine.....per lb. 20
powd.....per lb. 30
Verona.....per lb. 20
powd.....per lb. 25
Pink.....per lb. 60
powd.....per lb. 65
Pleurisy.....per lb. 45
Poke.....per lb. 20
Pond Lily, White.....per lb. 25
Yellow.....per lb. 28
Rhatany.....per lb. 28
Rhubarb, East India.....per lb. 75
fingers, select..per lb. 2 60
powd, best....per lb. 1 00
Sarsaparilla, Hond.....per lb. 60
Mex.....per lb. 25
Senega.....per lb. 80
Skunk Cabbage, powd.....per lb. 25
Snake, Canada.....per lb. 25
Virginia.....per lb. 30
powd.....per lb. 35
Spikenard.....per lb. 30
powd.....per lb. 35
Squill.....per lb. 20
powd.....per lb. incl. bot. 30
Stillingia, ground.....per lb. 25
Unicorn, False.....per lb. 75

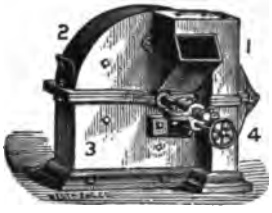
Root (*Cont'd*) Unicorn, True...per lb. $0 75
Valerian, English.....per lb. 20
powd.....per lb. 25
German.....per lb. 20
powd.....per lb. 25
Wild Indigo.....per lb. 25
powd.....per lb. 30
Yellow Dock.....per lb. 17
Zedoary.....per lb. 20
ground.....per lb. 25
Rubidium Iodide.....per oz. 1 50
and Ammon. bromide, ½-oz. vials per oz. 2 75
Sabromin, 1-oz. bottles.....per oz. 70
Tablets, 20's.....per box. 25
Saccharin.....per oz. 30
per lb. 2 00
Salacin.....per oz. 1 25
Tablets, 20's.....per box. 45
Sal Acetosella.....per lb. 28
Sal Crab Orchard.....per lb. 24
Epsom.....per lb. 3
in bbl. lots.....per lb. 1½
Glauber.....per lb. 4
in bbl. lots.....per lb. 1½
Rochelle.....per lb. 27
boxes 50 lbs.....per lb. 25
Soda.....per lb. 3
in bbl. lots.....per 100 lbs. 90
Salicin.....per lb. 4 60
Salipyrine.....per oz. 30
Salochinin.....per oz. 1 15
Saloform tablets.....per oz. 1 00
Salol.....per oz. 12
per lb. 1 17
Salophen.....per oz. 1 00
Santonin.....per oz. 2 10
Scopolamine } in 5-gr. tubes. per gr. 15
Hydrobrom. } in 15-gr. tubes per gr. 15
Seeds, Ambrette.....per lb. 60
Angelica.....per lb. 60
Anise, German.....per lb. 12
Italian.....per lb. 15
powd.....per lb. 20
Star.....per lb. 25
Annatto.....per lb. 15
Bird, mixed, 1-lb. cartons.per doz. 72
Burdock.....per lb. 15
Canary, Sicily.....per lb. 6
in bag lots.....per lb. 4½
Smyrna.....per lb. 6
in bag lots.....per lb. 4½
Caraway.....per lb. 12
Dutch.....per lb. 15
powd.....per lb. 20
Cardamom, Aleppo.....per lb. 1 45
Malabar.....per lb. 1 60
Mangalore.....per lb. 1 55
powd.....per lb. 1 50
Cedron.....per lb. 1 00
Celery.....per lb. 40
powd.....per lb. 45
Colchicum.....per lb. 45
powd.....per lb. 50
Conium.....per lb. 28
Coriander, English.....per lb. 15
German.....per lb. 12
powd.....per lb. 18
Cumin.....per lb. 20
Dill.....per lb. 20
Fennel.....per lb. 25
powd.....per lb. 27
Flax.....per lb. 3
200-lb. bbl.....per lb. 5
ground.....per lb. 3
Flaxseed, ground, barrels..per lb. 5
Flea.....per lb. 20
Fœnugreek, powd.....per lb. 7
in keg lots...per lb. 5
Grains Paradise.....per lb. 20
Hemp.....per lb. 5
in bag lots.....per lb. 3½
Henbane.....per lb. 40
Jambul.....per lb. 45
powd.....per lb. 50
Jequirity, powd.....per lb. 60
Job's Tears.....per lb. 20
Larkspur.....per lb. 1 50
Lobelia.....per lb. 65
powd.....per lb. 70
Lovage.....per lb. 75
Millet, American.....per lb. 5
Mustard, Black, Trieste.....per lb. 8
White.....per lb. 10
Parsley.....per lb. 20
Poppy, Blue.....per lb. 15
White.....per lb. 35
Pumpkin.....per lb. 25
Quince, German.....per lb. 1 50
Russian.....per lb. 1 25
Rape, English.....per lb. 10
German.....per lb. 8
Sabadilla.....per lb. 25
powd.....per lb. 40
Stavesacre.....per lb. 25
powd.....per lb. 40
Stramonium.....per lb. 18
powd.....per lb. 27
Strophanthus, brown.....per lb. 60

Seeds (*Cont'd*) Strophanthus, green, per lb. $1 00
Sunflower..... per lb. 8
Water-fennel..... per lb. 35
powd..... per lb. 35
Watermelon..... per lb. 39
Worm, American..... per lb. 17
powd..... per lb. 20
Levant..... per lb. 35
powd..... per lb. 40
Seidlitz Mixture..... per lb. 22
in 50-lb. lots..... per lb. 18
Silver Nitrate, cones (lunar caustic) per oz. 65
cryst..... per oz. 53
fused..... per oz. 56
Chloride..... per oz. 77
Oxide..... per oz. 1 14
Snuff, Maccaboy..... per lb. 54
Rappee..... per lb. 54
Scotch..... per lb. 54
Soap, Castile, mottled, com'l... per lb. 11
pure..... per lb. 12
white, Conti's..... per bar. 65
in 40-lb. boxes. per box. 6 25
powd..... per lb. 35
Green, American..... per lb. 12
German, in 2 and 5-lb. jars. per lb. 31–35
Marseilles..... per lb. 16
Whale-oil..... per lb. 10
Soda Ash..... per lb. 5
bags of 300 lbs..... per lb. 1½
Sodium, Metallic, in 1-oz. g.-s. vial and case..... per oz. 25
Acetate, pure granular... per lb. 15
Arsenate..... per lb. 55
commercial..... per lb. 20
Arsenite..... per oz. 12
Benzoate, gran. or powd.. per lb. 44
Biborate, calcined (see Borax).
Bicarbonate, chances..... per lb. 10
in kegs.... per lb. 7½
Natrona... per lb. 3½
in kegs.. per lb. 1¾
c. p..... per lb. 14
Bichromate..... per lb. 20
Bisulphite..... per lb. 17
solution..... per lb. 12
Bromide..... per lb. 56
Cacodylate..... per oz. 44
Carbonate, c. p., Photographic, in 1-lb cans incl..... per lb. 17
dried, c. p..... per lb. 25
purified..... per lb. 12
Monohydrated, U.S.P. per lb. 11
Chlorate, cryst. and gran. per lb. 25
Cholate..... per oz. 29
Cinnamate..... per oz. 26
Citrate, cryst. and gran.. per lb. 53
Fluoride..... per lb. 30
Glycerinophos, 75%..... per oz. 20
Glycholate..... per oz. 33
Hydrate(caustic soda)by alc., c.p., per lb. incl. 50
fused, pure.... per lb. incl. 20
Hypophosphite..... per lb. 90
Hyposulphite..... per lb. 5
in keg lots..... per lb. 2½
c. p..... per lb. 15
Iodide..... per lb. 3 85
per oz. 33
Nitrate, purified..... per lb. 15
com'l in 100-lb. bags.. per lb. 4
Oleate..... per oz. 13
Acid..... per oz. 13
Perborate..... per lb. 75
per oz. 13
Peroxide..... per lb. 1 00
2-oz. cans..... each. 25
Phosphate, cryst..... per lb. 9
dried, powd..... per lb. 22
gran..... per lb. 12
Salicylate, bulk..... per lb. 45
c. p..... per lb. 60
from Oil Wintergreen. per lb. 3 00
per oz. 26
Silicate Solution..... per gal. 50
Succinate..... per oz. 23
Sulphate (see sal Glauber) in bbl. lots, per lb. 1
dried, pure..... per lb. 12
pure, gran..... per lb. incl. 13
Sulphite, a nhyd. photo... per lb. 22
cryst..... per lb. 10
U. S. P..... per lb. 15
dried, powd..... per lb. 15
recryst..... per lb. 25
Sulphocarbolate..... per lb. incl. 44
Tungstate, pure..... per lb. 1 20
Valerate..... per oz. 37
and Ammonium sulphate. per lb. 60
Sparteine Sulphate..... per oz. 49
Spermaceti..... per lb. 40
Spermin, Poehl, for Hypod. Inject., boxes, 4x1 Cc. tubes..... each. 3 00
Internal use, bxs. 4x1 Cc. tubes. ea. 3 00
Spirits Ammonia..... per lb. 54
Aromatic..... per lb. 56

Spirits (*Cont'd*) Eth. Nit. U. S. P., per lb. $0 60
Spts. Ether, Comp..... per lb. 80
Lavender Comp..... per lb. 51
Starch, powd..... per lb. 5
Iodide..... per lb. 34
Strontium Acetate..... per oz. 15
Bromide..... per oz. 12
per lb. 60
Chloride..... per lb. 24
Iodide..... per oz. 33
Lactate..... per oz. 15
Nitrate..... per lb. 18
Peroxide..... per lb. 3 50
per oz. 34
Salicylate..... per oz. 13
Strophanthin, 5-gr. vials incl.. per gr. 80
Strychnia, cryst., ⅛'s..... per oz 1 30
powder, ⅛'s..... per oz. 1 25
Nitrate, ⅛'s..... per oz. 1 60
Sulphate, cryst., ⅛'s..... per oz. 1 25
powder, ⅛'s..... per oz. 1 25
Stypticin, in 15-gr. vials..... per vial. 30
Sugar of Milk (see Milk Sugar).
Sulphonal (25 ozs., $1.25)..... per oz. 1 25
Sulphon-ethyl-methane..... per oz. 38
per lb. 5 25
Sulphon-methane..... per oz. 28
per lb. 3 50
Sulphur, Flor..... per lb. 3½
in barrel lots..... per lb. 2¾
Iodide..... per oz. 46
Lac, precip..... per lb. 16
Roll..... per lb. 3½
in barrel lots..... per lb. 2 4-10
washed..... per lb. 10
Syrup Rock Candy..... per gal. 75
barrel..... per gal. 58
½ barrel..... per gal. 61
Talcum, U. S. P..... per lb. 13
purified, U. S. P..... per lb. 22
Tamarinds..... per lb. 20
pulp..... per lb. 40
Tannalbin..... per oz. 80
Tablets, 5 grs., 100 in bot.. p. bot. 1 00
Veterinary..... per oz. 65
Tannigen..... per oz. 80
Tannoform..... per oz. 22
Tapioca, East India..... per lb. 8
Tar, Barbadoes..... per gal. 75
Birch..... per lb. 25
Pine..... per doz. pints. 75
Tartar Emetic..... per lb. 42
powd..... per lb. 42
Terebene..... per lb. 80
per oz. 15
Terpin Hydrate..... per oz. 8
per lb. 50
Terpinol..... per oz. incl. 47
Terra Alba..... per lb. 5
Thalline Sulphate..... per oz. 2 85
Theine, ⅛'s..... per oz. 55
Theobromine, Alkaloid..... per oz. 70
and Sodium Salicylate.... per oz. 45
Salicylate, true salt..... per oz. 1 25
Theophyllin, B. & S..... per oz. 1 40
sodium..... per oz. 1 50
salicylate..... per oz. 1 10
Thermol..... per oz. 75
Thiianin, in 1-lb. tins..... per lb. 1 75
Thioform..... per oz. 80
Thiocol..... per oz. 1 00
Tablets, 5 gr., 100 in bot... per bot. 1 25
Thiosinamine..... per oz. 44
Thymol..... per lb. 2 45
per oz. 27
Iodide..... per oz. 30
Thyraden Knoll..... per oz. 1 20
Tablets, 2 gr., 100 in bot.. per bot. 58
Thyroidin, 1-oz. vials..... per oz. 1 25
Tin, Metallic, feathered..... per lb. 35
pure, granulated..... per lb. 1 65
powdered..... per lb. 1 00
sticks..... per lb. 1 00
Muriate, cryst..... per lb. 47
c. p..... per lb. 75
solution..... per lb. 27
Oxide, white..... per lb. 80
Toluene..... per lb. 45
Traumaticin, Sol. Gutta Percha per oz. 24
Trimethylamine, 10% sol..... per oz. 55
Hydrochlor., ½-oz..... per oz. 3 50
Trional (25 ozs., $1.40)..... per oz. 1 50
Trioxmethylene (Paraform)... per oz. 20
Triphenin..... per oz. 50
Tripoli, bulk..... per lb. 5
Mount Eagle..... per doz. 60
Tropacocaine Hydrochlor., 5-gr. and 15-gr. vials..... per gr. 6½–8
Turpentine..... per gal. 60
Chian, ozs. jars incl..... per oz. 45
Venice, true..... per lb. 45
White (gum thus)..... per lb. 10
Unguentum, Créde, ½-ozs. only. p. oz. 90
Uranium, Acetate, 1-oz. vials.. per oz. 62
Chloride, in 1-oz. vials.... per oz. 47
Nitrate, in 1-oz. vials..... per oz. 45
Oxide..... per oz. 24

Uranium (*Cont'd*) Sulphate, in 1-oz. vials..... per oz. $0 47
Urea, pure cryst..... per oz. 21
Urethane..... per oz. 54
Urocedin, 5-oz. pkgs..... each. 1 25
Uritone..... per oz. 25
Uropherin..... per oz. 1 50
Uretropin..... per oz. 60
Tablets, 7½ grs. each, 20 in box, per box. 25
Vanillin, in 1-oz. vials..... per oz. 50
Veratrin, pure, in ⅛-oz. vials.. per oz. 2 20
Sulphate, in ⅛-oz. vials.. per oz. 2 50
Verdigris, powd..... per lb. 35
Ex. dry..... per lb. 40
Distilled cryst..... per lb. 50
Veronal (Diethylmalonylurea) Merck, per oz. 1 60
Water, Bitter Almond, dist'd... per lb. 30
Cherry Laurel..... per lb. 30
Chlorine..... per lb. 30
Distilled..... per gal. 15
Elder Flower..... per lb. 40
Lycetol-Bayer, Gout, qts.. per doz. 5 50
Orange Flower, triple..... per lb. 25
Piperazin, Gout, qts..... per doz. 5 25
Rose, triple..... per lb. 25
Chiris', in gal. bots..... per gal. 2 00
Wax, Bayberry..... per lb. 50
Bees, yellow, refined..... per lb. 42
in cas..... per lb. 50
W. H. B. brand:
1- & 2-lbs.. per lb. 42
¼- & ½-lbs. per lb. 45
in cas..... per lb. 50
white..... per lb. 55
S. B..... per lb. 35
Carnauba..... per lb. 58 to 78
Fruit Can, Red..... per lb. 4
Japan..... per lb. 20
Mineral Ceresin, yellow..... per lb. 20
white..... per lb. 25
White Precipitate..... per lb. 1 45
powd..... per lb. 1 55
Whiting, Gilder's..... per lb. 2
Spanish..... per lb. 2½
Thomas's, Superfine, in ¼-lb. pkgs., 2 doz. in box... per box. 75
Wood, Brazil, ground..... per lb. 6
Camwood..... per lb. 8
Fustic, cut..... per lb. 4
ground..... per lb. 5
Guaiac, rasped..... per lb. 6
Hypernic..... per lb. 6
Logwood, chip..... per lb. 4
ground..... per lb. 5
Nic..... per lb. 5
Quassia, chip..... per lb. 10
ground..... per lb. 15
powd..... per lb. 20
Quercitron..... per lb. 5
Red, cut..... per lb. 6
Red Saunders, ground..... per lb. 8
Naphtha (Pyroxylic Spirit) per lb. 20
Xylene, Xylol..... per lb. 40
Yohimbin, ½ & 1 gm. vials... per gm. 10 00
Tablets (20 in tube)..... per tube. 1 10
Zinc, Acetate, 1-lb. cartons..... per lb. 30
Benzoate, 1-oz. vials..... per oz. 24
Borate..... per oz. 24
Bromide, 1-oz. vials..... per oz. 17
Carbolate, 1-oz. vials..... per oz. 24
Carb., precip., pure, 1-lb. cart, per lb. 27
Chloride, fused..... per lb. 30
1-oz. vials.... per oz. 10
c. p., granulated..... per lb. 40
1-oz. vials..... per oz. 10
sol. com'l..... per lb. 12
medicinal..... per lb. 19
Cyanide, 1-oz. vials..... per oz. 21
Ferrocyanide, 1-oz. vials... per oz. 24
Hypophosphite, 1-oz. vials . per oz. 20
Iodide, 1-oz. vials..... per oz. 49
Lactate, 1-oz. vials..... per oz. 21
Metallic, c. p., in sticks..... per lb. 30
pure..... per lb. 20
Nitrate, pure..... per lb. 75
Oxide, U. S. P., 1-lb. cartons. p. lb. 25
c. p., 1-lb. cartons..... per lb. 30
English, Hubbuck's..... per lb. 45
Permanganate, 1-oz. vials.. per oz. 58
Peroxide..... per lb. 4 00
per oz. 30
Phosphate..... per lb. 22
1-oz. cartons..... per lb. 10
Phosphide, 1-oz. vials..... per oz. 22
Salicylate, white, 1-oz. vi'ls. per oz. 18
Stearate..... per lb. 1 00
per oz. 15
Subgallate..... per oz. 18
Sulphate, cryst., 1-lb. cartons.. lb. 10
c. p. (cryst.)..... per lb. 16
Sulphide, 1-oz. vials..... per oz. 16
Sulphite, 1-oz. vials..... per oz. 19
Sulphocarbolate..... per lb. 42
1-oz. cartons..... per oz. 8
Tannate, 1-oz. vials..... per oz. 24
Valerianate, 1-oz. vials..... per oz. 22

DRUG MILLS



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